DOCUMENT RESUME

ED 189 048 SP 016 220

TITLE Revised Guidelines for Comprehensive Health Education, Kindergarten through Grade 2.
INSTITUTION Nebraska State Dept. of Education, Lincoln. Div. of Instructional Services.
PUB DATE 75
NOTE 212p.; For related documents, see SP 016 225-226, SP 016 214, and SP 016 219.

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Disease Control; *Grade 1; *Grade 2; *Health Education; Heredity; Human Body; Human Relations; *Kindergarten; Mental Health; Nutrition; Physical Fitness; Primary Education; Safety; Self Care Skills

ABSTRACT

These health curriculum guidelines were designed for teachers of students in kindergarten through second grade. Five major topics are covered: 1) anatomy, physiology, physical fitness; 2) mental health, family and peer relationships; 3) disease and mental health; 4) nutrition; and 5) consumer health, safety and chemical substances. Suggested intructional objectives, teaching strategies, and classroom activities are included along with media resources. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

JUL 3 1980

ED189048

Revised Guidelines for

Comprehensive Health Education

Kindergarten through grade 2

Developed under the direction of
Roy R. Gray, administrative consultant,
Health and Physical Education,
in cooperation with
Sandra Knopf, consultant,
Health Education

Issued by
Nebraska Department of Education
Division of Instructional Services

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Gerald Sughroue,
assistant commissioner

Anne Campbell,
commissioner of education

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
A. Campbell
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

SP016220

233 S. 10th St. 1975 Lincoln, Nebraska

ACKNOWLEDGEMENTS

Grateful appreciation is expressed to the members of the Nebraska Comprehensive Health Education Advisory Council for their guidance and direction in the development of these revised guidelines:

Dr. Dean Austin
Lincoln Public Schools

Dr. Thomas P. Colgate
Chadron State College

Suzie Flynn
Westside Community Schools

Dr. Thomas Hallstrom
Omaha Public Schools

Dr. Ian Newman
Nebraska Center for Health Education
University of Nebraska

Ann Smith
Bridgeport Public Schools

Jerry Trimble
Lincoln Public Schools

Dr. Raymond C. Westerfield
University of Nebraska–Omaha

Dave Zalowdek
Grand Island Public Schools

UTILIZATION OF THE REVISED GUIDELINES

These revised guidelines for comprehensive health education have been designed to offer teachers suggestions which can assist in providing varied learning opportunities for students.

While acquisition of accurate health knowledge is important, of far greater concern is formation of desirable personal and public health attitudes, values and practices. With this concern in mind, instructional objectives have been developed which are stated in measurable and/or observable terms. It is hoped these objectives will assist teachers in determining if their students are developing desirable health attitudes, values and practices.

These revised guidelines contain five major topic areas. These topics and their areas of concentration are:

1 Understanding Our Body – anatomy, physiology, physical fitness;

2 Understanding Ourselves and Others – mental health, family and peer relationships;

3 Keeping Ourselves Healthy – disease and dental health;

4 Understanding Our Environment – nutrition, heredity and environment; and

5 The Safety of Ourselves and Others – consumer health, safety and chemical substances.

The format of these guidelines has been designed to provide the teacher with:

1 health concepts which are appropriate for the K-2 student;

2 instructional objectives written in measurable and/or observable terms;

3 suggested teaching strategies and classroom activities; and

4 suggested support materials.

Concept	Instructional Objective	Suggested Activities	Media Resources
A short statement which identifies a health concern.	**Two or more statements which will assist the teacher in determining if the student has attained the health concept.**	**Suggested teaching strategies and activities which will assist the student in attaining the instructional objective.**	**Suggested support material which may be used as a teaching activity.**
The human body is often referred to as a machine.	The student should be able to: 1 Make at least three comparisons between parts of the body and various machines.	1 Have the students make a poster which compares the functions of body parts to common machines. (Other suggested activities include role play situations, small group and individual projects, field trips, discussion questions.)	1 "In A Museum," an ITV lesson. (Other resources include films, filmstrips, transparency masters, printed material.)

These guidelines also contain three appendices.

> Appendix A contains ITV telelesson overviews and activities. Appendix B contains illustrations which may be used for making transparencies and reproductions. Appendix C lists Nebraska-based agencies and associations which have free or inexpensive materials available.

It should be stressed that **this is only a guide.** The ideas presented are intended as suggestions which schools may use as they develop a health program for K-2 students. This guide does not make precise recommendations about which concepts or areas should be covered at kindergarten, at grade one or at grade two. The State Board of Education and the Department of Education have consistently stated that course content and the selection of instructional materials are concerns of each local school system. Such decisions should be based upon the specific needs and interests of the students as well as the educational philosophy of the local community.

Health education is very broad in scope and draws upon the physical, social and life sciences. Thus a comprehensive health education program is interdisciplinary in nature. Therefore, it is strongly suggested that all teachers within a school system work together to coordinate their efforts to avoid repetition or omission of content.

Innovative teachers will not limit themselves to the suggestions in these guidelines, but rather will go beyond to create their own original learning situations.

TABLE OF CONTENTS

Preface	5
Introduction	7
Utilization of the Revised Guidelines	15
Health Concepts	
1 Understanding Our Body	(17)
2 Understanding Ourselves and Others	(31)
3 Keeping Ourselves Healthy	(43)
4 Understanding Our Environment	(55)
5 The Safety of Ourselves and Others	(65)
Appendix A: Telelessons	(77)
Appendix B: Transparency Masters	(145)
Appendix C: Resources	(171)

Preface

The Comprehensive Health Education Act (79-1270) adopted by the Nebraska State Legislature in 1971 requires that:

1 instruction in comprehensive health education shall take place in all schools;
2 the Commissioner of Education shall prepare and distribute, upon request, teaching aids and materials for effective courses in comprehensive health education; and
3 schools failing to meet the provisions of the act will be guilty of a deviation from the approval and accreditation rules and regulations.

Acting upon the directive of this legislation, the Department of Education with the assistance of an advisory committee developed ***Guidelines for Comprehensive Health Education: A Conceptual Approach***, and made this publication available to schools in 1972. Those guidelines suggested that a truly comprehensive program should include 17 major topics of instruction. Concepts and teaching activities were suggested for each instructional topic.

Local school systems were urged to use the guidelines as a foundation or "working tool," to be of assistance as schools designed instructional programs which met the specific needs and interests of their pupils while being consistent with the educational philosophies of their local communities. Decisions about program content, selection of instructional materials and teaching methodology were and are the responsibility of each school system.

Since the passage of the Comprehensive Health Education Act and the subsequent development of health curriculum guidelines, the Department of Education has received numerous requests from school administrators and teachers for assistance in two common areas:

1 the development of observable and/or measurable instructional objectives; and
2 the identification of suitable supportive instructional materials.

It is because of these continued requests that the Department of Education has undertaken revision of the comprehensive health education curriculum guidelines. This publication (for grades K to 2) is the first of five such guidelines which will span grades K to 12.

A majority of the concepts suggested in the original health guidelines are included in this revised edition. The concepts have been reorganized, however, into seven or fewer major topic areas rather than the original 17 areas. Learning objectives have been designed to assist teachers in determing if their students have attained the concepts. Supportive media which can assist in the learning process have been identified for each concept.

According to the desires of the local school system, instructional television can play a major supporting role in utilization of these guidelines. Existing and newly-developed ITV health education telelessons will be broadcast on a schedule which matches the scope and sequence of the health concepts and learning objectives found in these guidelines. This coordinated combination of print and other media resources is the most comprehensive curriculum project ever undertaken by the Department of Education.

These curriculum guidelines are suggestions. How the guidelines are used is a decision of each local school district. Each school district decides the specific content to be included in its instructional program, and at which grade levels that content is to be taught.

M. Anne Campbell
Commissioner of Education

Introduction

Health Education—A Statement of Philosophy

Traditionally, man has been concerned with the interaction between his body and his environment, and the premise has been that physical health is an end in itself. An understanding of man's biologic problems, the means to physical health, the nature of diseases and the signs and symptoms suggesting ill health are vital to everyone. However, physical health is in itself only a means to an end. Man should not be concerned only with the shell which separates him from his environment, but with his total being.

The concept of total health implies an understanding of a sound body and the appreciation of one's potential and individual worth. It permits expression of an individual's creativity and enhances the dignity and satisfaction that comes through individual ability to give of oneself. Man cannot assume the state of total health alone, for everyone functions with others and within his or her environment.

Approaches to total health education must employ parallel programs, on the one hand aimed at children, their families and their environment, and on the other hand striving to develop new understandings on the part of teachers and school administrators. The successful realization of education for health results from the combined efforts of individuals who complement the activities of each other, supplement the information offered and reinforce the attitudes developed in youth by challenging them to think.

An understanding of the social phenomena underlying new knowledge and emerging problems appears to be particularly significant in relation to curriculum development focused on health education. Because this area of study is concerned with the individual – not as a biological organism, an intellectual or emotional being, or a social creature – but rather as a whole person, an entity, all of the related forces basic to curriculum development seem to command equal consideration.

Good health is not accidental. It is a product of nature and culture, and is related to understanding and values. Good health must not only be philosophical; it must be capable of extension into the realities of daily living. Good health and related understanding should not be, and must not remain, the right of a privileged few. It is to this end that the Department of Education, assisted by the Nebraska Comprehensive Health Education Advisory Council, has undertaken preparation of a guide for the sharing of basic concepts and objectives relevant to health education.

Approaches to total health education must employ parallel programs, on the one hand aimed at children, their families and their environment, and on the other hand striving to develop new understandings on the part of teachers and school administrators.

Health Education in Education

Through the years the term "health" has taken on many different meanings. In ancient societies physical well-being and rules for hygiene were stressed. One of our first recorded references to a concept of health was by Deemus Junius Jebenal (50-130 A.D.) who wrote about "a sound mind in a sound body." Later, during the Seventeenth and Eighteenth Centuries, John Locke was often quoted: "A sound mind in a sound body is a short but full description of a happy state in this world; he that has these two has little to wish for."

Somewhat later, around the mid-Nineteenth Century, Horace Mann, secretary to the first board of education in the United States in Massachusetts, was instrumental in stressing the importance of physical well-being and emphasizing health education.

However, mental and social well-being were not appreciably emphasized until the mid-Twentieth Century. Through the years broader and more complete meanings of health have evolved. Today our society is concerned not only with curing or treating sickness or preventing disease, but is also concerned with raising the level of individual health and well-being.

Health is now considered to be a dynamic quality of life rather than a static entity. It is the result of the interaction of many factors and conditions. Hoyman emphasizes this when he refers to health as: "... a moving target ... a dynamic ecologic resultant involving the interaction of many factors and conditions..."[3]

Health is a combination of physical, mental and social well-being, all dynamically interrelated. The individual functions as a whole, as an integrated individual with each dimension of health influencing the others. So physical illness has an effect on emotional well-being and social relationships. The psychosomatic aspects of health illustrate dynamic interrelationships between various dimensions of health.[4]

Educators have been consistently vocal in their expression of concern for the role of health education in education. One of the earlier and more important statements emanated from the 1918 report by the Commission on the Reorganization of Secondary Education appointed by the National Education Association.[9] The report declared health to be one of the seven cardinal principles of education.

The Educational Policies Commission[6] in ***The Purpose of Education in American Democracy*** (1938) described desired pupil outcomes in each of four groups of educational objectives: a) self-realization; b) human relationships; c) economic efficiency; and d) civic responsibility. In education for self-realization, the commission stated that the health-educated person:

1 Understands the basic facts about health and disease;
2 Protects his own health and that of his dependents; and
3 Works to improve the health of the community.

More recently, the Educational Policies Commission,[5] in ***An Essay on Quality in Public Education***, stated that the elementary curriculum should, among other things, teach the essentials of safety and personal health and promote physical coordination and skill.

In a statement about the objectives of schools prepared by the American Council on Education, the objective of health education was to lead students to improve and maintain their own health and to accept their share of responsibility for protecting the health of others.[1]

Other significant bodies have emphasized the role of health education, including the White House Conference on Education in 1955.[8] In response to the question, "What should our schools accomplish?," the conference report recommended that schools help each pupil to develop physical and mental health and wise use of time, including constructive leisure pursuits.

Health is now considered to be a dynamic quality of life rather than a static entity. It is the result of the interaction of many factors and conditions.

A more recent significant statement about the outcomes of education is included in the report of the National Education Association's, ***Project on Instruction.*** It states, in part, "... the content of health instruction belongs in the school curriculum because such knowledge is necessary, is most efficiently learned in school and no other public agency provides such instruction."[7]

As the preceding statements indicate, health education has been an objective of education for many years. It is a discipline which focuses on and strives for maximum physical, mental and social efficiency for the individual, the family and the community.

Health is a broad area and it is positive in its implications. Multiple factors contribute to achievement of a state of health. The health education curriculum must be built around the biological and social facts and principles which relate to man's existence, survival and adjustment. Health education may be conceived as an applied science which rests on solid scientific and social foundations.

Facts and principles, drawn from such scientific areas as genetics, anatomy, physiology, bacteriology, microbiology and psychology, as they can be applied to human living and human health, are essential. Likewise, facts and principles arising from sociology, social psychology, anthropology, economics and political science, known to be significant in understanding health needs and problems, become equally important in the health education process. As such, health education is a discipline in which the relevant knowledge and ideas from several fields are combined and synthesized.

Health Education—A Definition

Have you ever been asked: What is health education? How does what you teach in health education relate to a child's everyday involvement with self, home, school and community? Are facts as important as attitudes in health education? In other words, have you ever been asked to put into words just exactly what you believe health education really is, or is not, and how it contributes to the total educational program of each child? Perhaps if you have not been asked by someone else, you have asked yourself questions similar to these.

Such questions must be probed until meaningful answers are set forth. While these guidelines are devoted to helping health educators, administrators and other educational personnel involved with health programming approach a better understanding of school health education, its program, methods and application, the American Medical Association and the National Education Association, through their Joint Committee on Health Problems in Education,[2] have succinctly outlined the essential elements in the definition of what health is, what it is not, and how it can relate meaningfully to the school.

Health Education Is:

Education for health for healthful living of the individual, family and community.

An academic field and subject. All of its content and objectives are intellectual and academic in nature. Its content must have meaning and purpose for students now as well as for future students.

A relatively new discipline. The natural (biological), the behavioral and the health sciences provide its foundation.

Facts, principles and concepts pertaining to healthful living. These constitute its body of knowledge.

The body of knowledge identified, organized, synthesized and utilized in appropriate courses and experiences; it is sequentially arranged to form the discipline.

Derived from sociology, psychology, educational psychology and the behavioral sciences—its purpose is to change favorably health behavior (knowledge, attitudes, practices).

A needed approach to bridge the gap between scientific health discoveries and man's application of these discoveries in daily life.

Health Education Is Not:

Hygiene of yesteryears. It is not "blood and bone" hygiene, nor is it physiological hygiene.

Anatomy of physiology or both of these combined. These fields serve as its foundation, but do not contribute the major concepts of its body of knowledge. They are necessary as background to understand health concepts applied to living.

A pure science, but an applied science. It is an applied science concerned with man's understanding of himself in relation to health matters in a changing society.

Physical education. Health education and physical education are separate and distinct fields. They have similar goals and are closely related, but their activities and the conduct of activities are completely different. Sound physical education programs properly conducted contribute to the health of the individual.

Physical fitness. It contributes to the total fitness of man. It is not synonymous with muscle fitness.

Driver education. Health education is related to driver education through its safety area. Driver education is but one facet of safety.

Contributing to the well-educated individual by providing meaningful health experiences which can change health behavior. (Educational Policies Commission, *The Purpose of Education in an American Democracy*, 1938).

Best achieved by developing the rational powers of people (critical thinking), enabling them to make wise decisions and to solve personal, family and community health problems. (Educational Policies Commission, 1961.)

Based upon and improved through basic and applied research.

Best conducted by professionally prepared health educators from accredited colleges and universities.

An integral part of the curriculum at every level and an essential element in the general education of all students.

The educational component of a school, college or university health program (instructions, services, environments).

A requirement course organized to deal with legal provisions of alcohol, narcotics and fire prevention. These are essential problems that should be incorporated with other basic problems to provide a structured course or program.

A rainy day or incidental instruction. Health education must be carefully planned and incorporated into the curriculum. It must be taught in a wholesome learning environment in which pupil activities can be carried out, particularly through problem-solving situations under the guidance of professionally prepared health educators.

Just grooming practices such as tooth brushing and hair combing. Health education has gone far beyond grooming.

What Does Health Education Mean for Your School?

Through adequate education for health, you can provide students with:

Opportunities to discuss problems of interest to them, to assess the values of others, and to identify with an adult directly interested in the problems of their age group.

The opportunity to use real problems in studying the process of critical thinking.

Interest in the health and safety aspects of their own daily activities.

A sense of responsibility for personal health.

A feeling of responsibility for community health.

A critical attitude toward advertising of health services and products.

An understanding of growth and development.

An opportunity to develop the ability to understand and interpret health information.

The knowledge and skill to understand and utilize reliable health care.

An appreciation for good health.

Pride in developing and maintaining good health.*

*This discussion of what health is and is not, and of how it can relate meaningfully to your school is reprinted with the permission of the Joint Committee on Health Problems in Education of the National Education Association and the American Medical Association.

Factors Affecting Classroom Climate

Following are some factors which may influence the students' ability to acquire positive concepts through health education.

A Healthful School Environment

The school should be a laboratory where the individuals have opportunities to explore their own ideas and to develop personal values and understandings. Schools can contribute to the health (and educational achievement) of children and youth by making it possible for them to live healthfully while they are in school.

A Comfortable Social-Emotional Climate and an Alert Interested Teacher

The teacher guides the learning of desirable social attitudes, i.e., cooperation and fair play, as well as activities and interests to help in growth and maturity development. The teacher needs to be aware of individual health needs of students. An important part of developing a healthful school environment is the social-emotional climate which the teacher establishes in the classroom. The climate must render the student free to inquire, to question, to investigate and to discuss with both the teacher and fellow students. Any threat of embarrassment or reproof must be eliminated if the learners are to have the opportunity to develop individually according to their needs.

An Understanding of Goals for Self-Direction

Students must learn to assume responsibility for care and maintenance of their own health. After leaving school, when self-direction is required, the student will need to know how to plan and carry out a program of healthful living. To help achieve this goal, it is imperative that students be given opportunities for analysis, evaluation and application of health information through varying experiences. Without such opportunities it becomes increasingly difficult to expect that they will do so after the security of the school environment is behind [illegible] based solely on theoretical examination of information.

Guidance in Meeting Health Problems

The health of children – physical, mental and social – depends upon what they do for themselves more than upon what is done for them. While the home and community remain the major influences in determining the health attitudes of children, it becomes the responsibility of the school to serve as a catalyst by effecting a meaningful merger of all these influences upon the life of the individual.

Meaningful Units Adapted to the Maturity Level of the Children

Programs in health education must be continuous – taught on a regular basis. The content of the program is determined by the needs and interests of the children and by the stage of growth and maturity which they have reached. Readiness is an important factor for learning.

Motivation for Learning

Before learning can be meaningful, a student's interest must be stimulated. The desire to learn is an essential prerequisite for critical thinking and the teacher is challenged to help each individual develop this desire according to his or her interests and needs. The opportunity to make decisions, to accept responsibility for choices and to aid in planning, developing and evaluating projects will increase student interest and motivation.

Opportunity to Use Real Life Situations as a Basis for Interests in Health

Health is more than a subject to be taught. It is a way of life. As such it presents daily opportunity for development of attitudes, concepts and skills that will help students to become healthier, happier individuals. Teachers can have a dynamic impact upon students if they will use these daily interactions to best advantage. To serve as an exemplar to which the learner may look with pride can be one of the teacher's greatest assets. One's actions speak so loudly that what is said can scarcely be heard.

REFERENCES

1 American Council on Education. *A Design for General Education* (edited by T. R. McConnell, Washington, D. C.: The Council, 1944).

2 American Medical Association. *Why Health Education* (Chicago, Illinois, The Association, 1966).

3 Hoyman, Howard S., "An Ecologic View of Health and Health Education," *Journal of School Health* (March, 1965).

4 Fodor, John T. and Gus T. Dalis, *Health Instruction – Theory and Application* (Philadelphia: Lea and Febiger, 1966).

5 National Education Association and American Association of School Administrators. *An Essay on Quality in Public Education.* (Washington, D. C.: The Educational Policies Commission, 1959).

6 National Education Association and American Association of School Administrators. *The Purpose of Education in American Democracy.* (Washington, D. C.: The Educational Policies Commission, 1938).

7 National Education Association. *Schools for the Sixties: A Report of the Project on Instruction.* (New York: McGraw-Hill Book Co., Inc., 1963).

8 The Committee for the White House Conference. *A Report to the President.* (Washington, D. C.: Superintendent of Documents, Government Printing Office, 1956).

9 United States Department of the Interior, Bureau of Education, *Cardinal Principles of Secondary Education,* Bulletin 1918, No. 35, (Washington, D. C.: Superintendent of Documents, Government Printing Office, 1918).

Understanding Our Body

This unit includes anatomy, physiology and physical fitness. The study opens a world of information and discovery into body parts, body systems, the interrelationship between these systems and the application of this information to one's personal physical fitness program.

While knowledge of body structure and function is important, educators must be careful that the information presented is not sterile in and of itself. This information becomes meaningful and relevant to the learner only when he is helped to relate it to his own physical fitness needs, now and in future years. This is the challenge to every health educator: to help learners associate health information to their real world of needs, interests, emotions and feelings.

Concept	Instructional Objective	Suggested Activities	Media Resources
1 The human body is often referred to as a machine.	The student should be able to: 1 Make at least three comparisons between the body and different machines. 2 Explain why it is important to keep each part in good working order. 3 Relate at least three ways that people are not like machines.	1 Have the students, as a group, make a poster which compares the functions of body parts to common machines. Use a life-size outline of a primary child and have the students place cut out pictures or drawings of machines in the appropriate locations. Discuss with the class the similar functions of the body parts and machines. These are the usual comparisions for the body and machines: heart/pump; ear/microphone and speaker; kidney/filter; eye/camera; stomach/blender; brain/sending and receiving radio. 2 Have the students role play how damage to one part of a machine affects the whole machine. An egg beater, a watch, a clock or a film projector are good choices. 3 Discuss with the class ways people are not like machines. For example, people have reproduction and decision-making capabilities, they have emotions, and many of their body parts can't be replaced.	1 "You, the Living Machine," a Nebraska Department of Health film. 2 "In a Museum," "Check Up" and "What Are You, Anyway," ITV lessons. (Appendix A has summaries of the telelessons and suggestions for follow-up activities.) 3 Transparency masters in Appendix B: a) a man and corresponding machine parts; b) a comparision of an eye and a camera.

Concept	Instructional Objective	Suggested Activities	Media Resources
2 Bones provide body structure.	The student should be able to: 1 Draw a facsimile of a human skeleton. 2 Explain that the skeleton provides the framework which structures and supports the human body. 3 Identify those areas of the skeleton that provide protective cages for vital organs (skull, rib cage, pelvis).	1 Examine a skeleton. 2 Have the students assemble a paper skeleton. Cut pieces from cardboard or use a Halloween skeleton. 3 Use a rag doll to illustrate how the skeleton provides the framework for the human body. Explain that it is this framework that gives the body its shape and support. 4 Using a skeleton picture or a model, locate the ribs, skull and pelvis. Illustrate and disucss how these bones protect the vital organs inside (heart, lungs, brain and reproductive organs).	1 "What Holds You Up," ITV lesson. (See Appendix A.) 2 Transparency masters in Appendix B: a) skeleton; b) skull, ribs and pelvis.

Concept	Instructional Objective	Suggested Activities	Media Resources
3 Muscles shorten and lengthen to allow the skeleton to move in various ways.	The student should be able to: 1 Explain that muscles work in pairs; one of the pair shortens when the other lengthens. 2 Demonstrate at least three different body movements.	1 Ask the children to place their hands on the muscles of one upper arm. Have them flex their arms at the elbow to feel the movement as the muscles shorten and lengthen in response to the activity. 2 Have each child demonstrate how he can hop like a rabbit, bend like a marjonette, swing his arms like tree limbs in the wind and jump like a jumping jack. Discuss the muscles used for these movements. 3 Explain to the children that muscles allow us to move and still remain stationary (nonlocomotor). They also can move us from place to place (locomotor). Have each child demonstrate examples of both locomotive and nonlocomotive movement.	1 "Hands," "Handy Hands" and "No Strings on You," ITV lessons. (See Appendix A.) 2 Transparency master in Appendix B: the muscular system.

Concept	Instructional Objective	Suggested Activities	Media Resources
4 The body is arranged in units or building blocks called cells.	The student should be able to: 1 Identify parts of a cell (membrane, nucleus, protoplasm). 2 Name at least three different types of cells in the body.	1 Have the children use clay or building blocks to build a "human body." Discuss how people begin life as a single cell which continues to divide until it takes human shape. 2 Have the children draw a cell and label its main parts (membrane, nucleus, protoplasm). 3 Have the students identify and discuss the differences in shape and structure of various cells (skin, bone and muscle). The cell transparency master in Appendix B could be adapted for use as a handout for this activity. 4 Have the students study the incubation period of a hatching duck or chicken egg through pictures or with an incubator in the classroom.	1 "What Are You Made Of?", ITV lesson. (See Appendix A.) 2 Transparency masters in Appendix B: a) cell parts; b) different kinds of cells.

Concept	Instructional Objective	Suggested Activities	Media Resources
5 Groups of cells working together form tissues or organs. Tissues and organs work together to form body systems.	The student should be able to: 1 Explain that tissues and organs are composed of many cells. 2 Distinguish between different types of tissues and organs. 3 Name at least two of the major body systems (circulatory, respiratory, nervous, digestive) giving the major organ in each system. 4 Explain how the circulatory system and respiratory system work together to supply cells with oxygen.	1 Have the children observe a piece of onion skin with a magnifying glass or microscope to see structure. 2 Have the children examine models of organs (heart, stomach, liver, lungs). Explain that each of these organs is made of its own specific type of cell. 3 Show the children visual overlays of the body to observe bones, muscles and other organs. The World Book Encyclopedia section on the human body has these overlays. 4 Using wall charts or diagrams, discuss with the class the various systems and the main organ of each (circulatory-heart, respiratory-lung, nervous-brain, digestive-stomach). 5 Compare the circulatory system to a transport system (trucks bring food and oxygen to the cells and sanitation trucks carry away the waste).	1 "Our Wonderful Body," a film from the Nebraska Department of Health series. 2 "Side by Side," ITV lesson. (See Appendix A.) 3 Transparency masters in Appendix B: a) nervous system; b) circulatory system (heart); c) respiratory system (lungs); d) body organs. 4 Refer to Appendix C for wall charts and diagrams available from the Nebraska Heart Association.

Concept	Instructional Objective	Suggested Activities	Media Resources
6 Special cells combine to form our five main sense organs.	The student should be able to: 1 Name the five main senses. 2 Explain the function of each of the five senses. 3 Give at least two examples of how the senses work together.	1 Have the students compile a booklet of magazine pictures or drawings illustrating the senses and their functions. 2 Have the children play "Guess What" by feeling and smelling objects with their eyes closed. Ask them to note specific differences in texture and odor of objects. 3 Show the relationship of taste and smell by having the children discover whether they can tell what they're tasting when their eyes are closed and their noses are pinched. Try small amounts of liquids like water, milk, tea, soda pop. Then try an apple, orange, lemon. Keep the lemon until the last. Then try tasting something else afterwards to see how lemon blocks out other flavors. 4 Discuss with the class how senses keep us safe (seeing and smelling smoke, seeing and hearing cars, seeing and tasting spoiled food, feeling heat to avoid hot objects).	1 "You and Your Five Senses" and "Hear Now," Nebraska Department of Health films. (See Appendix C.) 2 "Getting the Message," "Your Busy Brain," "Listen, Look and Learn," and "Eyes and Lenses," ITV lessons. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
7 The circulatory system is similar to a transportation system and the heart is the system's key part.	The student should be able to: 1 Identify the heart as the major organ of the circulatory system. 2 Describe how the heart works like a pump. 3 Compare the circulatory system to a transportation system.	1 Show the class a picture or model of the human body. Identify the heart as the key part. 2 Have the children simulate the action of the heart's pumping by opening and closing their hands in a basin of water. 3 See Suggested Activity 5 under Concept 5. 4 Show students how to locate their pulse in neck, wrist and temples. Discuss why the pulse can be felt at these locations (the blood vessels are close to the surface of the skin at these points).	1 "The Heart and Your Bloodstream," a Nebraska Department of Health film. 2 "Your Heart the Mighty Muscle," ITV lesson. (See Appendix A.) 3 Transparency master in Appendix B: the heart. 4 Refer to Appendix C for materials available from the Nebraska Heart Association.

Concept	Instructional Objective	Suggested Activities	Media Resources
8 The respiratory system brings oxygen to the body and removes carbon dioxide. The lungs are the system's key parts.	The student should be able to: 1 Locate the lungs in the body. 2 Compare the action of the lungs to a sponge or an air bellows. 3 Explain that the exchange of oxygen and carbon dioxide takes place in the lungs (inhaling takes in oxygen; exhaling expels carbon dioxide).	1 Show the class a model or picture of the human body. Identify the lungs as the major organ of the respiratory system. 2 Demonstrate the comparison of the lungs and a bellows; both take in and then expel air. 3 Compare the lungs to a sponge. Demonstrate how a sponge absorbs water in the same manner as the lungs take in air. Also compare the consistency and texture of the lungs and the sponge. 4 Have the children place their hands on their rib cages while they take deep breaths, exhaling slowly. Discuss the oxygen/carbon dioxide exchange happening inside.	1 "Take a Deep Breath," ITV lesson. (See Appendix A.) 2 Transparency master in Appendix B: the lungs.

Concept	Instructional Objective	Suggested Activities	Media Resources
9 Daily exercise contributes to good health, and a strong heart, and it increases the effectiveness of the lungs.	The student should be able to: 1 Explain that all muscles (including the heart) need exercise to remain healthy. 2 Explain that vigorous physical activity makes the heart stronger and increases the air capacity of the lungs. 3 Demonstrate at least two examples of vigorous physical activity.	1 Have the students draw pictures of favorite ways to exercise. This could be integrated with an art project. 2 Have the children role play and discuss what happens to muscles without proper exercise. For example, a person who tries to stand and walk after being bedridden will have difficulty, as will a person who tries to move his arm after it has been in a cast for months. 3 Use models and wall charts to describe how exercise makes the heart and lungs stronger and more efficient. (The lungs supply more oxygen to the blood and the heart pumps greater quantities of blood with each beat.) 4 Have each child demonstrate examples of vigorous physical activity.	1 "Physical Fitness and Good Health," a Nebraska Department of Health film. 2 "Move Those Muscles," ITV lesson. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
10 Exercise and play contribute to personal happiness and making friends.	The student should be able to: 1 Role play having fun at play. 2 Role play someone who's not having fun at play. 3 Demonstrate how exercise and play help us make friends.	1 Have the students tell what is fun to them. 2 Have the students role play someone having fun (on playground equipment, playing tag, riding bikes). 3 Have the students role play someone who's not having fun (losing a game, fighting, being left out of an activity). 4 Discuss with the class how we feel when we share and cooperate with others. Have the children role play: a) The type of person they like to play with and the kind they do not. b) How to help someone who wants to fight all the time. c) How they feel when they win a game and when they lose. d) How it feels to be left out of a play time activity. e) How they might encourage a newcomer to join in at play time.	1 "Movement," ITV lesson. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
11 Exercise and play contribute to health and well-being.	The student should be able to: 1 Give at least one example of how exercise and play help the body to develop. 2 Explain how mental health is affected by exercise and play. 3 Demonstrate how relationships with others are influenced by exercise and play. 4 Identify the suitable times and conditions for exercise and play.	1 Have the children locate their pulse (at their wrist, chest or side of neck). Count the number of beats within 15 seconds. Then have the children run in place for one minute and repeat the count. Discuss how activity increases the heartbeat, helping the heart develop into a strong muscle. 2 Discuss how exercise and play affect our mental health. For example, ask the children how it feels: a) to run through a grassy field on a spring day. b) to swing and feel wind in their hair. c) to be made to sit very quiet and still for a long period of time. 3 Ask the class to dramatize an activity that involves teamwork; choosing up sides and playing a game of kicksoccer, for example. Consider how it feels: a) to be part of a team. b) to win a game; to lose a game. c) to make a big mistake. How do you feel when another player makes a mistake? 4 Survey the class about the number of hours they spend in physical activity in a day's time. Talk about the time when certain play is not allowed such as before bedtime, during meals, in the classroom.	1 "Play and Stay Healthy," ITV lesson. (See Appendix A.) 5 Have the children draw pictures of play activity that is possible outdoors but not indoors. Talk about the advantages of playing outdoors (fresh air, sunshine, room to move about). 6 During recess demonstrate how to use slides, swings and other playground equipment. Discuss that safe practices should be followed to keep ourselves and others healthy.

Concept	Instructional Objective	Suggested Activities	Media Resources
12 Good posture is important to growth and a healthful appearance.	The student should be able to: 1 Demonstrate good walking, standing and sitting position. 2 Demonstrate at least two examples of poor posture. 3 Explain why poor sitting and standing posture may contribute to curvatures of the spine (stooped shoulders, sway back, low shoulders). 4 Explain the relationship between how people feel and their posture.	1 Have the children role play everyday situations. Note if the children use good posture sitting in a chair, standing to greet someone, bending to pick up something. 2 Have the class start each day by taking time to observe posture, straighten clothes, tuck in shirts, wipe off shoes, comb hair, wash hands. 3 Discuss with the children how poor sitting and standing posture may become a habit and contribute to curvatures of the spine (stooped shoulders, sway back, low shoulders). 4 Have the children use puppets to dramatize how we look when we feel happy, sad, mad, disappointed, frightened.	1 "Your Posture – Your Choice," ITV lesson. (See Appendix A.)

Understanding Ourselves and Others

This unit includes mental health and family and peer relationships. The concepts in this study should be helpful in the total mental and social growth and development of the student. A mentally healthy person possesses a realistic perspective of himself as a whole person and he relates effectively to other people in general and to the world at large. For the K-2 student, the world includes mainly himself, his family and his friends.

Healthy mental behavior will enable the student to enhance every aspect of his life. He will be a vital member of his family, his school and the society to which he belongs.

Concept	Instructional Objective	Suggested Activities	Media Resources
1 "You" as a person are very important. You are unique, different from anyone else.	The student should be able to: 1 Describe ways people are different from each other. 2 Explain that most people grow in similar ways but at different rates and to different sizes. 3 Identify his importance by constructing an "All About Me" folder.	1 During this unit, have each child develop an "All About Me" folder. Give each student a folder to hold his collection of information about himself – pictures, drawings, activity papers, other things he wants to add. Encourage the students to personalize their folders by decorating them in any way they choose. 2 Help the children make their fingerprints using an inked pad. Each child should compare his with those of three others, noting the differences. Suggest that the children include their prints in the folders. 3 Ask the students to draw pictures or write words that indicate ways each is unlike everyone else. (Fingerprints, heredity, family traditions.) 4 Ask the children to bring pictures of themselves, their family and friends to class. Help them categorize the photos by approximate age. Encourage the students to discuss the order in which growth occurs, such as an infant crawls before he walks and babbles before he talks. 5 Illustrate that growth is unique for each individual by measuring each child and recording his height on a bar graph.	1 "The Social Side of Health," a Nebraska Department of Health film. 2 "How Did I Get To Be Me?," "Everybody's Different" and "No Two Alike," ITV lessons. (Appendix A has summaries of the telelessons and suggestions for follow-up activities. Stress that although children vary in height, their size is normal as long as they are healthy. 6 Plan a special week for each child, being sure each has a week at some time during the year. During Chris' special week, for example, plan special games, activities and displays about him. Let each child know when his special week is coming up. Parents may be able to provide materials and ideas for displays and activities.

Concept	Instructional Objective	Suggested Activities	Media Resources
2 You should be proud of the things you do well.	The student should be able to: 1 Give at least two examples of things he does well. 2 Explain that having pride in the things people do well makes them feel good. 3 Give at least two examples of things he would like to do better.	1 Discuss pride with the students. What does it mean? Why is it important? Ask them to draw a picture of something they do or something they have that they take pride in. 2 Write on the board: "I would like to do _____ well." Ask each student to draw a picture or write a phrase that completes the sentence. 3 Schedule a day when students can share their hobbies, talents and interests with each other. Ask for volunteers to demonstrate and teach their special skill or knowledge to others who are interested. 4 Ask the students to explain, dramatize or draw: a) things they can do; b) things they would like to be able to do; and c) actions they can take to achieve these goals.	1 "All By Myself" and "Look At You Now," ITV lessons. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
3 Everyone is a member of a family at home and at school.	The student should be able to: 1 Identify several functions of a family. 2 Give at least two examples of families to which they belong (home, school, church, clubs). 3 Identify the similarities and differences between the home family and the school family.	The functions of a family include: a) providing physical care. b) nurturing personality growth. c) meeting emotional needs. Although families may vary according to type and members involved, as long as they meet the above requirements they are considered a family. 1 Develop family awareness by having students draw and cut out pictures of school and home family members. As a class, make a booklet of these drawings. 2 Discuss with the children the many families to which they may belong: home; school; church; neighborhood; club. 3 Have the children role play how families meet the three functions of a family: a) provides physical care (food, shelter, clothes); b) nurtures personality growth (cooperation and sharing, influences values attitudes and practices); and c) meets emotional needs (provides love, friendship, sense of belonging, someone to talk with).	1 Appendix B contains a transparency master showing the functions of a family. 4 Discuss with the class how the home family is different from the school family. Home / School Biological relationship / No Biological relationship Lasting, permanent relationship / More temporary situation Deep personal relationship / Less personal relationship

Concept	Instructional Objective	Suggested Activities	Media Resources
4 There are similarities and differences in families.	The student should be able to: 1 State the functions of a family. 2 Give at least two examples of how family membership varies according to type and number. 3 Compare various family cultures within the United States and the rest of the world.	1 Have the children role play these basic functions of all families: a) provides physical care; b) nutures personal growth; and c) cares for emotional needs. 2 Have the children draw pictures of various families and their members. 3 Have the children make a display depicting various family cultures. Ask them to illustrate variances in clothing, food, dwelling, customs, values. Stress that though families vary in membership, they still are functioning families.	1 "Family Portrait" and "Everybody Else and You," ITV lessons. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
5 Family unity is developed by the members sharing and doing things together.	The student should be able to: 1 Give at least two examples of how he helps his family at home. 2 Give at least two examples of things families do together. 3 Demonstrate something he could do to help improve family unity.	1 Have the children role play examples of things they do to help at home. 2 Have the children make charts of their home responsibilities. Allow them to take the charts home to check daily, if desired. 3 Have the children draw pictures or relate experiences that involved the whole family. 4 Have each child describe something special he could do to help improve family relationships. Special means something unexpected or out of the ordinary.	1 "What Are Families For?" and "Dad and I," ITV lessons. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
6 Friends are important.	The student should be able to: 1 Tell how he knows if someone is his friend. 2 Tell how he feels if someone is not his friend. 3 Give at least three examples of things that he does with his friends.	1 Have the children draw pictures of their friends and ask them: a) Are all their friends the same size and shape? b) Can an older person be their friend? c) Are animals your friends? 2 Have the children talk about how they know if someone is their friend. What do they look for in friends? What does a friend do for them. 3 Have the children discuss how they feel if they think someone is not their friend. How do they act toward each other? Is everyone in the classroom everyone's friend? Is everyone in their neighborhoods their friend? 4 Ask the children to draw pictures of things they do with their friends: a) What are their favorite activities? b) What activities are best done with only one friend. c) What activities require two or more friends.	1 "Friends" and "Everybody Needs a Friend," ITV lessons. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
7 Responsible behavior is a part of growing up. Improving behavior tells others that children are growing up.	The student should be able to: 1 Give at least one example of behavior that is acceptable for babies but not older children. 2 Give at least two examples of behavior that is unacceptable in the classroom, at home and at play. 3 Demonstrate at least two examples of responsible behaviors in the classroom, at home and at play.	1 Ask the children to bring in photographs and drawn or cut out pictures of babies displaying behavior that is unacceptable for older children, like temper tantrums, tattling and continual crying. 2 Have the children role play examples of behavior that is not acceptable (tattling, being a bully, making fun of others, for example). Also have the children role play ways to help a person who displays this behavior. 3 Have the children draw pictures of or dramatize responsible behavior (completing school work on time, cleaning up the room at home and school, displaying good sportsmanship).	1 "Our Angry Feelings," a Nebraska Department of Health film. 2 "The Selfish Giant," a film from the UNL Instructional Media Center.

Concept	Instructional Objective	Suggested Activities	Media Resources
8 People must respect the rights and property of other people and themselves.	The student should be able to: 1 Identify the need for rules. 2 Explain that the purpose of rules is to protect. 3 Demonstrate respect for property at home and at school.	1 As a class, make a list of rules people have. Write these on the board as the students identify them. These may include rules for home and classroom. Make another list of nonrules, e.g. wearing blue on Tuesday. Discuss why people have rules for some things and not others. Stress the idea that the purpose of rules is to protect. 2 Have the children dramatize what it would be like if there were no rules. Have them act out a home or school situation where there are no rules to control behavior. 3 Ask each student to identify the one thing that is most important to him. Discuss why he wants to protect it. Ask the students to describe how it feels when other people use their belongings. 4 Ask each student to name either a good rule, a necessary rule, a foolish rule, a bad rule or a rule that would make home or school a better place.	1 "Rules, Rules, Rules," ITV lesson. (See Appendix A.) 2 Refer to Appendix C for materials from the Nebraska Department of Public Institutions.

Concept	Instructional Objective	Suggested Activities	Media Resources
9 Feeling good or bad is part of life; one's adjustment to these feelings in oneself and others is most important.	The student should be able to: 1 Illustrate at least two examples of feelings. 2 Explain that feelings are normal. 3 Demonstrate how feelings can affect behavior. 4 Describe appropriate methods of dealing with feelings.	1 Ask each child to complete the following by drawing how he looks and telling how he feels: a) When I am happy, I feel ____ and look ____. b) When I make a mistake, I feel ____ and look ____. c) When I am frightened, I feel ____ and look ____. d) When others laugh at me, I feel ____ and look ____ 2 Ask the students to choose partners. Have the pairs face each other and while one makes a face (happy, mad, sad, frightened) the other guesses what feeling or emotion is being expressed. 3 Ask the children to consider ways of dealing with feelings. Have them identify fairly common problems at home or at school. Select students to role play the feelings involved in these problems. Ask for class suggestions about how to deal with these problems. 4 Have the children draw, make posters or tell ways to handle feelings and problems. This may include: a) asking for a friend's advise, b) working it out directly with the person involved; and c) forgetting the problem and working off the feeling by running around the block.	1 "You and Your Feelings, and "Everybody Is Afraid Sometime," ITV lessons. (See Appendix A.) 2 Transparency master in Appendix B: Happy, sad, mad and frightened faces.

Keeping Ourselves Healthy

This unit includes the areas of disease control and dental health. Disease is defined as a harmful departure from normal caused by destructive forces from within or without that interfere with the normal functions of the body. Of all diseases affecting people, untreated dental conditions are among the most common. However, it is encouraging that through education, a large percentage of these dental problems can be controlled or prevented.

The unit deals not so much with specific diseases as with the important understandings all students need to acquire if they are to cooperate intelligently in the control and prevention of disease on a personal and community basis.

Concept	Instructional Objective	Suggested Activities	Media Resources
1 Illness may be caused directly from germs.	The student should be able to: 1 Discuss that germs are all about us and cannot be completely eliminated. 2 Name two diseases that are caused directly by germs.	1 Although they can't be seen, germs are everywhere. Have the children role play: a) It is impossible to eliminate all germs. b) Some germs are not harmful. c) Other germs can get into our bodies and cause disease. d) What can be done to help prevent invasion of disease-causing germs. 2 Have the students check with their parents and make a list of all the diseases they have had. Note those diseases which are caused by germs -- colds, chicken pox, strep throat, flu, measles, mumps. 3 Select various pieces of food such as an orange, apple, banana, or bread slice or a piece of cooked potato. Place the foods in a dish and sprinkle with water. Let stand in the open air for at least an hour. Cover the dish with aluminum foil and put it in a warm, dark place. In a couple of days uncover the dish and check for any microbial growth. Use a magnifying glass to observe various types of microbes. They may be smooth, shiny, fuzzy, or threadlike.	1 "Your Protection Against Disease," a Nebraska Department of Health film. 2 "Bertie and Stan Microbe," ITV lesson. (Appendix A has summaries of the telelessons and suggestions for follow-up activities.)

Concept	Instructional Objective	Suggested Activities	Media Resources
2 Germs are spread in many ways (by air, water, food, garbage, skin, animals).	The student should be able to: 1 Describe at least two ways germs are spread. 2 Explain the need for cleanliness to prevent or control the spread of germs. 3 Demonstrate how germs can spread in a classroom situation.	1 Have the children draw pictures illustrating ways germs travel. Touch, water, food, air, garbage and animals are some ways. 2 Use an atomizer to demonstrate how coughing and sneezing spreads germs. Contact a local tuberculosis or lung association for photographs showing the actual range of cough and sneeze spray. 3 Demonstrate examples of personal health habits that can help prevent or control the spread of germs (washing hands before meals and after using toilet, using one's own drinking glass and toothbrush). 4 Have students pass a ball representing germs to one another. Call the ball "chicken pox" or "measles" or some other communicable childhood disease. Discuss with the students that they are exchanging germs as they pass the ball.	1 "Bertie and Stan Microbe," ITV lesson. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
3 We can help ourselves and each other stay healthy.	The student should be able to: 1 Give at least two examples of how people can help themselves and each other stay healthy. Proper cleansing of cuts, sufficient rest, proper clothing and diet are some examples. 2 Define one of the following terms: vaccination, antibodies, contagious. 3 Name at least one of the body's three natural defenses against germ invasion. (Skin, mucous membrane, antibodies.) 4 Demonstrate at least two examples of proper behavior around others when one is ill.	1 Have the children draw pictures or posters or have them construct a bulletin board showing how people can help themselves and each other stay healthy. 2 Define and discuss the following key words in the class: contagious, vaccination, infections, antibodies, immunization. 3 Pass a few mirrors around the class so each student may see the fine hairs in their noses which trap dirt and germs. Explain that the mouth, nose and ears have a moist lining (mucous membrane) which traps germs. 4 With the use of models discuss how our skin is our first line of defense against germ invasion. 5 Demonstrate how to behave around others to prevent the spread of disease when coughing, sneezing, eating, talking and using a drinking glass.	1 "Be Happy, Be Healthy," "Good Health Practices," "Health - Personal Cleanliness," "Hear Now," "Joan Avoids a Cold," "The Magic Touch," "Soapy the Germ Fighter," Nebraska Department of Health films. 2 "Sneezles, Wheezles and Measles," ITV lesson. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
4 An untreated or improperly treated illness or injury may lead to another more serious condition.	The student should be able to: 1 Explain why minor illness or injuries must receive proper treatment. 2 Give at least two examples of a more serious medical condition which can result from lack of treatment or improper treatment of minor illness or injury. 3 Explain why it is necessary to follow the advice of doctor and/or parents when ill or injured.	1 Ask the school nurse to give the class examples of minor illnesses that can lead to major health problems. For example, earache or ear infection/hearing loss; strep throat/heart damage; cold/pneumonia; and measles/eye and ear damage. 2 Have the children list and discuss the reasons that one might allow an illness or injury to go untreated. Fear, being too busy, waiting and hoping the problem will go away are some examples. 3 Have the children role play the following situations: a) What might happen if they do follow parents' advice. b) Going to a doctor. c) Spending a night at the hospital. d) Taking medications (orally or shots). e) Being forced to stay indoors.	1 "Sometimes I Need Help," ITV lesson. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
5 Illness and injury may cause changes in physical and emotional health.	The student should be able to: 1 Demonstrate or illustrate at least three feelings. 2 Give at least two examples of feelings people have when they are ill. 3 Explain that these feelings may be Natute's way of telling people something is wrong with them. 4 Discuss the need to tell adults when he doesn't feel well.	1 Have the children draw faces showing various feelings and have them match these feelings with various situations, such as children at play, child with skinned knee, child with measles. 2 Discuss with the class that these feelings may be Nature's way of telling them something is wrong. 3 Have the children role play the need to tell adults (parents, teacher, doctor) about these feelings which may indicate illness.	1 "Changing Feelings," ITV lesson. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
6 Many professionals help people stay healthy and care for them when they are injured or ill.	The student should be able to: 1 Name at least four kinds of people who can help when people are injured or ill. (Doctor, nurse, dentist, pharmacist.) 2 Explain how (at least two of) these people help keep us healthy and/or care for people when they are ill or injured.	1 Discuss the following health care professionals with the class (perhaps some of them could visit the class): a) The doctor. In addition to caring for people when they are ill or injured, discuss how the doctor is interested in keeping us well through yearly examinations and immunizations. You might want to demonstrate some of the equipment used by a doctor. b) The nurse. Discuss the types of nurses and where they work; schools, doctors' offices, clinics, hospitals. c) The dentist. Relate experiences at the dentist. Demonstrate and discuss preventive care (brushing to remove plaque, using floss, fluoride coating). d) The pharmacist. Discuss the pharmacist's role on the health care team.	1 "If You Go to the Hospital," "Going to the Hospital" and "Overnight at the Hospital," ITV lessons. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
7 Teeth have many functions.	The student should be able to: 1 Explain at least two functions of teeth (eating, speech, appearance). 2 Identify the incisors, cuspids and molars, using a picture, a model or a mirror. 3 Explain how the shape of the teeth dictates their purpose and function. 4 Demonstrate how people might look and talk if they had no teeth.	1 Demonstrate the three main functions of teeth (speech, eating and appearance) by the following activities: a) Have the children say words which are affected by our front teeth (such as "think," "thump," "lonely.") Notice that the tongue must touch the insides of the front teeth to form these words. b) While in the lunchroom bring to the students' attention the need for teeth for eating and chewing. c) Have the children draw pictures of how they imagine people might look if they had no teeth. 2 Pass small mirrors around the class and have each child identify his incisors, cuspids and molars. 3 While at lunch have the student eat an apple, a carrot and celery. Have them notice how the incisors bite, the cuspids tear and the molars grind food.	1 "Smile Your Teeth Are Working," ITV lesson. (See Appendix A.) 2 Transparency master in Appendix B: the three kinds of teeth. 3 Refer to Appendix C for printed materials from the Nebraska Department of Health and the Nebraska Department of Education.

Concept	Instructional Objective	Suggested Activities	Media Resources
8 Teeth undergo changes in size, number and kinds with age.	The student should be able to: 1 Explain the following terms: toothbuds; primary teeth; permanent teeth; gums. 2 Distinguish between primary teeth and secondary teeth. 3 Describe the loss of primary teeth as a normal and natural process. 4 Identify the six-year molar and discuss its importance as the first permanent tooth.	1 Using pictures or models, discuss the following terms with the class: toothbuds; primary teeth; secondary teeth; gums. 2 Have each child count his own teeth. Note the number of primary teeth and the number of permanent teeth. Talk about differences between the two sets of teeth such as size, shape, length of time in the mouth. 3 Have the students share their experiences with the loss of a tooth. Discuss this as a normal and natural process. 4 Using small mirrors, have each student locate his six-year molar. Explain that this tooth is the first of the permanent teeth and that it requires special care.	1 "Good Mouthkeeping," ITV lesson. (See Appendix A.) 2 Refer to Appendix C for printed materials available from the Nebraska Department of Health and the Nebraska Department of Education.

Concept	Instructional Objective	Suggested Activities	Media Resources
9 Food in all forms affects the teeth.	The student should be able to: 1 Explain that foods from all four food groups are essential for overall good health and for good teeth. 2 Describe the importance of adequate amounts of milk for good dental health. 3 Identify at least three sweet, sticky foods which are harmful to teeth (chocolate, caramel, marshmallow). 4 Name at least three snack foods which are nutritious and better for teeth than sweets.	1 Have the children make a bulletin board display of the decay formula – "sugar + plaque + susceptible tooth = decay." Discuss the decay process - bacteria eat the sugar left on the teeth, acid is formed as a by-product of this process, the acid destroys the calcium which weaken the enamel and leaves the tooth exposed. 2 To illustrate the effect of acid on substances containing calcium (such as tooth enamel and egg shell) place a whole egg in a bowl of acetic acid (vinegar) for 24 hours. The eggshell will become soft as the vinegar decalcifies the shell. 3 Cut out pictures of milk (in all its forms) and present it as an important source for replenishing the calcium that is destroyed in the process described in the preceding activity. 4 Construct a poster or a mobile illustrating nutritious snack foods (apples, carrots, celery, peppers).	1 "Sonny's Lucky Dream," a Nebraska Department of Health film. 2 Refer to Appendix C for printed materials available from the Nebraska Department of Health and the Department of Education.

Concept	Instructional Objective	Suggested Activities	Media Resources
10 Daily mouth care is important.	The student should be able to: 1 Tell how often teeth should be brushed. 2 Demonstrate how to properly brush teeth to remove all plaque (using a disclosure tablet and toothbrush). 3 Maintain his/her own "Daily Brushing Chart." 4 Give examples of what one can do if it is impossible to brush the teeth (swish and swallow, eat an apple or carrot).	1 Demonstrate use of colored disclosure tablets to find plaque and the use of a toothbrush to remove plaque. 2 Prepare a daily brushing chart for the children to take home to hang in the bathroom for recording when teeth have been brushed. Reinforce the need for daily mouth care. 3 Demonstrate ways of cleaning teeth when a brush isn't available (swish and swallow, eat an apple, a carrot or celery). 4 Integrate with science class to make toothpaste. Mix 1 teaspoon salt, 2 to 3 teaspoons baking soda and a drop or two of peppermint, wintergreen or cinnamon oil. Let pupils take some home for brushing teeth.	1 "Billy Meets Tommy Tooth," "Double Day of Danny Dillion," "Flossing and Brushing" and "Learning to Brush," films from the Nebraska Department of Health. 2 "Teeth White - Teeth Bright," a film from the UNL Instructional Media Center. 3 Refer to Appendix C for printed materials available from the Nebraska Department of Health and the Department of Education.

Understanding Our Environment

Nutrition, heredity and environmental health are included in this unit. Environment is defined as everything around you. Concepts are presented to make the student aware of the affect one's surroundings have on physical, mental and social development. Nutrition is included as an important part of the environment.

Heredity also is presented as a factor in growth and development. It determines in large measure how well people respond to stress and other influences in the environment. Heredity supplies the native capacities of an individual. Environment determines to a large extent how fully these capacities will be developed.

Concept	Instructional Objective	Suggested Activities	Media Resources
1 There are major necessities for life.	The student should be able to: 1 Name at least three things that are needed by all life forms (air, water, food, light). 2 Demonstrate the effect to animal or plant life if deprived of food, water or air. 3 Give at least two examples of other animal or human needs.	1 Bring in a plant and illustrate the effect of dehydration by not watering it for a number of days. Relate this to all other living things which require water as a major necessity. 2 Place a jar over a burning candle and observe how quickly the flame is extinguished. Relate this to the constant need people have for adequate sources of oxygen. 3 Compare food for the body to gasoline for an automobile. What happens when a car runs out of gas? What happens when people don't eat breakfast?	1 "What Keeps You Alive?" and "Life Needs," ITV lessons. (Appendix A has summaries of the telelessons and suggestions for follow-up activities).

Concept	Instructional Objective	Suggested Activities	Media Resources
2 There are likenesses and differences among living things.	The students should be able to: 1 Give at least three examples of similar needs of most life forms (air, water, food, rest, light, shelter). 2 Give at least two examples of different life forms (animal, plant, etc.). 3 Explain the differences between the life forms identified in objective 2. 4 Give at least three examples of likenesses in most animal forms (similar systems, similar senses).	1 Most life forms need food, air, water and light. Test this by growing several plants from seeds and eliminating one or more of the above requirements to observe the results. 2 Have the children make charts depicting likenesses and differences among life forms. 3 Have the children draw or cut out pictures of different life forms such as plant, animal, fish, fowl. 4 Using charts, diagrams or pictures, illustrate the differences between life forms.	1 "The Same Difference," ITV lesson. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
3 Food is essential for normal body growth.	The student should be able to: 1 Explain that all living things need food to grow. 2 Describe (verbally or through demonstration) how people feel physically and mentally when they don't eat a good breakfast. 3 Compare the differences in appearance and energy levels of properly nourished and improperly nourished people or animals.	1 Plant seeds and observe their growth. Use soil with insufficient nutrients, adequate nutrients and too many nutrients. 2 Have the children observe and discuss the eating habits of pets. Point out differences between large and small animals. If possible, have students bring in small pets that can be cared for and observed in the classroom. 3 Have children role play or draw pictures of people or animals that are properly nourished and those that are improperly nourished. Compare the body size, stance, alertness and energy of the two. 4 With the aid of puppets or by role play present Happy Healthy Hal who explains and illustrates the merits of a good breakfast to his friend Bad-Tempered Bill.	1 "Exploring Your Growth," a Nebraska Department of Health film. 2 "What's Your Fuel," ITV lesson. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
4 Some foods are more nutritional than others.	The student should be able to: 1 Identify the four basic food groups (milk, meat, bread and cereal, fruit and vegetable). 2 Match a variety of foods with the food group to which they belong. 3 From pictures of assorted foods, select a well-balanced meal according to the four basic food groups. 4 Give at least two examples of snack foods (fruit, carrot and celery sticks, raw cauliflower, and green peppers) which are more nutritious than sweets. 5 Make comparisons between the body's need for proper food with the following examples of an automobile and its fuel: a) A car than runs on premium fuel burning premium fuel. b) A car that runs on premium fuel burning regular fuel.	1 Construct a food train composed of an engine and four cars from milk cartons. Each car should be designated as one of the four basic food groups. 2 Have the children cut out or draw pictures of a variety of food and place each in the appropriate food car. 3 Using pictures, models or drawings of an assortment of foods, have the children select a well balanced meal according to the four basic food groups. 4 For a parents' day or open house, give a party and serve snack foods which are nutritional and healthful. 5 Make simple food mobiles showing: the four basic food groups; balanced meals; unbalanced meals; and nutritional snacks.	1 "Eat for Health," "Eat Well – Grow Well" and "Food for Fun," Nebraska Department of Health films. 2 "Journey Into Nutrition," a film from the UNL Instructional Media Center. 3 "It's What You Eat," ITV lesson. (See Appendix A.) 4 Transparency master in Appendix B: illustrating a food train.

Concept	Instructional Objective	Suggested Activities	Media Resources
5 Sleep, rest and proper food are important for tomorrow's exercise and play.	The student should be able to: 1 Demonstrate what happens when one does not get enough sleep or food. 2 Explain the body's need for sleep to rest and recover. 3 Compare the body's need for food to an automobile's need for fuel.	1 Have the children cut out or draw pictures of animals as they are sleeping. Be sure they include people as one of the examples. 2 Discuss with the children relaxing activities that may be engaged in before going to bed. 3 Compare the body to a machine that needs fuel (food) and a cooling off period (rest) to operate efficiently. 4 Have the children role play what happens when they do not get enough sleep, enough exercise or enough food.	1 "Be Healthy—Be Happy," a Nebraska Department of Health film. 2 Refer to Appendix C for printed material available from the Nebraska Department of Health.

Concept	Instructional Objective	Suggested Activities	Media Resources
6 Living things influence and are affected by their environment.	The student should be able to: 1 Give an example of how the environment affects dress and recreational activities. 2 Explain how noise, lighting, temperature, surrounding color, furniture can affect how people feel and act. 3 Give an example of how people change the environment in their classroom, home or community. 4 Give an example of at least one thing everyone can do to improve the environment.	1 Have the children make paper dolls with different types of clothes suitable for the various seasons or climates. 2 Have the children role play how they might feel or act: a) in a room that is too hot or cold. b) in a room that is painted bright red. c) when trying to read a book in a poorly lighted room. 3 Illustrate with pictures things which contribute to noise in the environment. Discuss noise that is fun and enjoyable as opposed to noise that is irritating. 4 Illustrate ways in which people can change their environment (rearrange the classroom, painting a room a favorite color, planting trees to beautify a section of the community). 5 Have the students draw pictures showing ways they can best care for personal belongings.	1 "Look Around You," "Feeling Spaces," and "Caring for the World," ITV lessons. (See Appendix A.) 2 Refer to Appendix C for printed material available from the Nebraska Department of Health, the Nebraska Department of Education, and the American Lung Association of Nebraska.

Concept	Instructional Objective	Suggested Activities	Media Resources
7 Living things reproduce their own kind.	The student should be able to: 1 Match sets of pictures of a variety of different plants (tomatoes, potatoes, roses, trees). 2 Match pictures of adult animals with pictures of their young.	1 Have the students draw or cut out a wide variety of plants. Have them match those of the same or very similar species. 2 Discuss the idea that like produces like: a) Can a dog ever be born with long ears like a rabbit? b) Can people have long noses like elephants? 3 If possible, take a field trip to the zoo and have the children observe parent animals and their babies. 4 Using sets of pictures of adult animals, have the children match adult animals with their young.	1 "The Day Life Begins," "Fertilization and Birth," "Human and Animal Beginnings" and "Wonder of Reproduction," films from the Nebraska Department of Health. 2 "In the Beginning" and "Secrets in Your Cells," ITV lessons. (See Appendix A.) 3 Appendix B contains transparency masters for: a) Matching a variety of plants; and b) matching adult animals with offspring.

The Safety of Ourselves and Others

Safety, consumer health and chemical substances are presented in this unit. Knowledge about what one is doing – whether it is how to do something or the limitations of an action or equipment, or the intelligent appraisal and use of health information, products and services – enters into safety education.

The concepts in this unit recognize that attitudes and values guide behavior and lead one into or away from a hazardous situation. Safe living involves the development and use of safety precautions while recognizing the inevitability and appeal of risk-taking.

Concept

1 Many people work to keep food, water and air safe.

Instructional Objective

The student should be able to:

1 Name at least three people whose job it is to help protect the safety of food, water and air.

2 Describe (verbally or through demonstration) how each of those people work to protect food, water and air.

3 Give at least one example of how everyone can improve or maintain food, air and water safety.

Suggested Activities

1 Have the students make a list of jobs that are concerned with protecting the safety of food, air and water (school dietician and cook, grocery and restaurant manager, health department workers, environmental specialists).

2 Invite representatives from city or county health departments to discuss how they protect food, air and water.

3 Visit or invite speakers from the local water plant to illustrate the purification process.

4 Have a member of the school cafeteria staff explain reasons for cleanliness standards for kitchen facilities and proper dress and hair apparel.

5 Have the children draw pictures of how everyone can help improve or maintain food, air and water. (Don't throw "junk" into rivers or lakes, encourage parents to observe "no open burning" regulations and to reduce the use of automobiles.)

Media Resources

1 "Safe All Around Us," ITV lesson. (Has summaries of the telelessons and suggestions for follow-up activities.)

Concept	Instructional Objective	Suggested Activities	Media Resources
2 Protective measures are taken to make certain food is safe for humans to consume.	The student should be able to: 1 Define the process of pasteurization. 2 Name a processing method, given key characteristics of the method. 3 Demonstrate using various food containers how food is stored to keep it clean and safe. 4 Give at least one example of governmental laws or regulations concerning food health.	1 Take a field trip to a milk company or dairy. Discuss pasteurization and homogenization of milk and the precautions taken to insure safe milk delivery. 2 Play a game with the students. Give various characteristics of a particular processing method and let the children guess the method. For example: This processing method keeps food very cold. Usually the food is thawed before it is eaten. Sometimes, the food is eaten when it's very cold. Other methods include canning, drying, freeze-drying, salting and smoking. 3 Have the students bring in examples of various food containers. Illustrate and discuss methods of keeping and storing food in a safe, clean manner. 4 Have the children collect a variety of food labels. Discuss what the labels tell about the food inside the container. 5 Show the class a sample of a government stamp on meat. By law, meat is inspected many times before it is available for purchase.	1 Appendix B contains transparency masters showing: a) types of food containers; and b) food labels.

Concept	Instructional Objective	Suggested Activities	Media Resources
3 Living and non-living hazards exist in the environment.	The student should be able to: 1 Name or draw examples of at least two hazards that one might encounter while walking to school. 2 Describe (verbally or through demonstration) the proper procedure to follow if approached and bitten or scratched by a strange animal. 3 Explain (verbally or through role-play) why children should not talk to strangers or accept anything from them.	1 Have the children make lists of the possible hazards one might encounter on the way to school. (Poisonious plants, fire, accidents, strangers, unfriendly animals, becoming lost.) 2 Have the children role play the proper procedure to follow if approached, scratched or bitten by a strange animal. 3 Discuss with the students why they should not talk to strangers or accept anything from them. Establish rules about what to do if students are approached by strangers. 4 Make a bulletin board display depicting the policeman as the students' friend. Illustrate the many ways that the policeman helps. Invite a police officer to visit the classroom and talk about the job.	1 "I'm No Food As a Pedestrian," UNL Instructional Media Center and "Danger Posion," Nebraska Department of Health films. 2 "Watch Out," ITV lesson. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
4 Courtesy is important to good safety practices.	The student should be able to: 1 Demonstrate by role-play safe and courteous practices while in school and on the playground. 2 Explain why courteous practices are necessary for a safe and healthful environment.	1 Have the children role play safe and courteous practices in the following situations: a) Walking down a hallway and around corners. b) Entering and leaving a building. c) Walking up and down steps. d) Drinking from a fountain. e) Playing on swings, slides, teeter-totters and other playground equipment. 2 Discuss the need for courtesy in developing safety practices.	

Concept	Instructional Objective	Suggested Activities	Media Resources
5 The responsibility for safety to and from school is shared by the home, community and school.	The student should be able to: 1 Give his full name, address and phone number. 2 Tell the most direct route to school. 3 Identify four of five given traffic signs. 4 Dramatize safe conduct while loading, unloading and riding a school bus.	1 Have the children cut out or draw pictures of people, houses and telephones. Have each child label his picture with his own name, address and phone number. 2 Have the children draw a map and fill in the safest route to school. Discuss it with parents. (Use the transparency master included in Appendix B.) 3 Make a traffic signal box (a milk carton covered with paper of appropriate colors could be used). Make traffic signs (danger, stop, slow, school, railroad) and discuss their meaning. (Use the transparency of various traffic signs in Appendix B.) 4 Prepare a list of safety rules for use when riding the school bus. Dramatize them by arranging chairs to represent the interior of a school bus. Show the correct way of boarding, riding, leaving and crossing in front of the bus. Include emergency evacuation procedures. 5 Have the children make posters of school bus rules and street signs, and of how to cross streets correctly.	1 "David Won't Be Here Today," a Nebraska Department of Health film. 2 "Safe Ride - Safe Day," ITV lesson. (See Appendix A.) 3 Appendix B contains transparency masters showing: a) a map from home to school b) traffic signs

Concept	Instructional Objective	Suggested Activities	Media Resources
6 Sharing safety knowledge can help others to prevent accidents.	The student should be able to: 1 Give at least three examples of people whose work involves accident prevention (policeman, foreman, nurse, busdriver). 2 Give at least one example of how safety knowledge can be shared at school and at home.	1 Interview (or invite to the classroom) a number of people (policeman, fireman, nurse, busdriver, parent, school patrol members) concerning their responsibility to share knowledge of accident prevention. 2 Have the children stage a dramatic play or puppet show on the theme of "safety." Invite other classes and parents to watch. 3 Have the children make bulletin board displays about safety in the school. 4 Have the children keep a record for several days of any unsafe situation they see at home, at school or in the community. Have them bring this concern to the attention of the whole class and discuss how (if possible) the problem can be eliminated.	1 "I'm No Fool Having Fun," "I'm No Fool in Water" and "Safe in the Water," films from UNL Instructional Media Center. 2 "Lost," ITV lesson. (See Appendix A.) 3 Refer to Appendix C for printed materials available from the Nebraska Society for the Prevention of Blindness and the Nebraska Department of Health.

Concept	Instructional Objective	Suggested Activities	Media Resources
7 Practice and preparation can save lives in many hazardous situations.	The student should be able to: 1 Explain safety procedures in case of a fire at home or at school. 2 Demonstrate appropriate action in a school bus emergency (bus accident, fire on bus, severe weather conditions). 3 Give at least two examples of items that would be included in a well-stocked first aid kit.	1 Have each student set up his own plan of action in case of a home fire (e.g. getting out of the building, alternate routes, getting brothers and sisters out, getting adult help, calling fire department). 2 Invite a fireman to explain why schools have fire drills. Have actual practice of both fire and civil defense drills with the children in various locations, such as class, lunchroom and laboratories. 3 Have the children role play proper procedures in the following school bus emergencies: a) bus-car or bus-train accident. b) fire on bus. c) Bus involved in severe weather conditions (blizzare, tornado, flood). 4 Make a first aid kit. Have the children bring a box (cigar box or shoe box size) and cover it with construction paper. Have them draw and color or cut out pictures of items to be included in a first aid kit, such as: bandages, soap, adhesive tape, cotton, scissors.	1 "Donald's Fire Survival Plan," "I'm No Fool with Fire," "How to Have an Accident at Home," Nebraska Department of Health films. 2 "Fire," ITV lesson. (See Appendix A.)

Concept	Instructional Objective	Suggested Activities	Media Resources
8 Physical hazards are posed by the improper or careless use of many chemical substances found around the home.	The student should be able to: 1 Describe two safety practices concerning the use of household substances. 2 List three common household substances which may be harmful if used improperly. 3 Demonstrate what should be done if a harmful substance is ingested.	1 Read warnings to the class from labels on empty paint cans, cleaning fluids, glue tubes and household cleaners. Discuss meaning and possible misuse of these volitile substances. 2 Have the children collect magazine pictures to be used in a chart depicting household products which may be dangerous (laundry soap, bleach, scouring powder). Let the children assemble the pictures by rooms in a house. 3 Discuss the poison symbol with the class. 4 Construct a cabinet made of heavy paper. Have the children place it in drawings of all things that may be poison. 5 Discuss safety factors concerning unknown or potentially dangerous substances, such as: store only in proper containers, read directions on label, store in safe place. 6 Have the children role play what to do if a harmful substance is ingested (act immediately, notify an adult, read directions on container, notify doctor and/or poison control center).	1 "Sniffy Escapes Poisoning," a Nebraska Department of Health film.

Concept	Instructional Objective	Suggested Activities	Media Resources
9 Medicines are designed to cure and prevent illness, but they can be dangerous if used improperly.	The student should be able to: 1 Distinguish between patent and prescription medicines. 2 Describe two safety practices concerning the use of medicine. 3 Demonstrate the proper procedure for taking medicine.	1 Have the children cut out pictures of patent medicines and make a poster displaying them. 2 Have the children bring in labels from used patent medicine containers. Discuss the safe dosages written on each label. 3 Discuss why a doctor's prescription is necessary to obtain certain types of drugs. 4 Have the children role play the various parts played by the doctor, pharmacist and a responsible adult in ordering, filling and administering a drug. 5 Discuss the safety practices that must be observed with medicines, such as following dosage directions, storing in a proper place and in a proper container and only taking medicine from a responsible adult. 6 Have the students relate their experiences with taking medicines.	1 "Algernon, the Ambulance," filmstrip available from the Nebraska Department of Health and Educational Service Units. 2 "Stop - Look and Live," ITV lesson. (See Appendix A.)

APPENDIX A

IN A MUSEUM

Concept 1-1

Summary of the Telelesson

Many body parts can be functionally compared to familiar machines. In the telelesson, Mr. Chapstein, a science teacher who's been captured by Myopians and placed in a museum, makes these comparisons:

Stomach = blender	Heart = pump
lungs = air bellows	brain = message control center
eyes = camera	

Follow-up Activities

1 Using the transparency included in the guide, continue the comparison of the eye and the camera. For example, the colored area of the eye, the iris, has a little opening in the middle called the pupil. The iris opens and closes to let in the proper amount of light. The iris or diaphram in a camera functions in a similar manner. So, when the eye looks at something, a tree, for example, the image is carried through the pupil, through the lens and then to the lining of the eye, the retina, which is similar to the film inside a camera.

2 Demonstrate the ability of blind persons to recognize objects by having a small group of children sit at a table. Blindfold them and then place various objects such as an orange, a pencil, a flower, a leaf on the table. Have the children attempt to identify them. Which of the senses are used to identify each object?

3 In the telelesson Mr. Chapstein told how earth machines, like human bodies, require regular care. For example, to operate properly many machines need some type of fuel. People also need fuel (food and oxygen) to grow and remain healthy. Also, if machines are exposed to adverse weather they may rust. Likewise, if people are exposed to similiar conditions without regard for how they are dressed, their resistance may be lowered and they would then be much more susceptible to disease. Have the class attempt to make further comparisons between machines and the human body.

CHECKUP

Concept 1-1

Summary of the Telelesson

Jeffrey has a routine medical checkup. While the doctor checks his throat, blood pressure, eyes, chest, feet, urine and blood, Jeffrey remembers how the mechanic gave the family car a checkup while he and his mother watched.

Follow-up Activities

1 Children will want to describe and compare their experiences at the doctor's. They should also be encouraged to express their feelings about these experiences, whether of pride, of courage, of anxiety or of apprehension.

2 Identify other systems with which children come in contact – fire fighting, telephone or intercom systems in the school, heating systems, the cafeteria, space ships. Have the children try to understand how various parts relate to each other to make the system function.

WHAT ARE YOU ANYWAY?

Concept 1-1

Summary of the Telelesson

Viewers are asked to compare themselves with a mechanized tin man. They quickly discover that because they are alive and have brains, they can do everything he can and much more besides.

Next, the children meet some gerbils and a monkey, and watch a paramecium through a microscope. It is noted that there are many different kinds of animals. Although each animal has a different kind of body, all animals are alive and growing and can move around. The viewers are led to understand that they are animals, too -- human animals with human bodies. To find out what is inside their bodies, they are introduced to an anatomical model. Louise points out some important organs (heart, lungs, liver, stomach, intestines, brain) and briefly explains the function of each.

Follow-up Activities

1 Have children make a drawing to show what they have learned about their bodies from viewing the telelesson. Note that the drawings will probably not represent what children have learned so much as what they can tell you.

2 Ask students how they think they are like machines and how they are different. Comparing an anatomical model and some see-through machine will be helpful. Note that both machines and humans have many parts, each with a special job. Both have a shape and a framework, both move and have moving parts inside, both need fuel to keep running, both need to be checked over and repaired occasionally and both need proper care to stay in good condition.

(Machines are different, however, in that they cannot grow, cannot think by themselves, do not have feelings, cannot do what they want, cannot talk and cannot make other machines like themselves. Most important, machines can be made to look and act alike, but no two persons are ever exactly alike.)

3 Have the children compare a specific animal's abilities with their own. How are they alike? How are they different? Emphasize the human animal's unique ability to make choices, to remember and to accomplish many things. Point out that the human animal can do these things because of a superior brain, useful hands and an upright walking position.

4 Children may have fun pretending to be a mechanical person. Have them try walking with stiff legs, writing with stiff hands, sitting down and getting up without bending except at the waist. Children may also enjoy imitating the movements and methods of communication of various animals.

WHAT HOLDS YOU UP?

Concept 1-2

Summary of the Telelesson

Lisa and Patty are building a teepee on a framework of sticks. Louise mentions other things that have frameworks to hold them up, like houses and umbrellas. Then she asks viewers, "What about you? Does your body have a framework inside, too?"

Children are encouraged to examine their own arms, hands, fingers and heads to find that there are, indeed, hard parts inside. They are told that there are more than 200 bones in their framework. To show them how this framework is put together, Ms. Bones, a human skeleton, is introduced. Skeleton is defined simply as "a framework of bones."

Although Ms. Bones' bones have different shapes and sizes, they are all alike in two ways: they are hard and they will not bend. "Human bones are hard for two very important reasons: to hold your body up and to give you your human shape." A cat's skeleton is used to demonstrate that each animal's bones are put together in a special way and that the structure of each animal is unqiue.

Children are asked to imagine what they would look like if, like a jellyfish, slug, bug, or paramecium, they had no bones. Louise points out that these animals are so small they don't need bones to hold them up. Louise asks, "If your bones are hard and don't bend, how are you able to move your body?" She encourages children to examine their fingers to find the joints, the places where the bones are joined together. Other important joints, particularly the jawbone and the spine, are also examined.

Finally, Louise leads viewers to discover how their skeleton protects the soft organs of their bodies: how the rib cage protects the lungs, heart and liver; and how the skull protects the most important organ of all -- the brain.

Follow-up Activities

1 Ask students to name things in the classroom which have frameworks. What is the framework made of (e.g., wood, plastic, metal)? What does it protect? How does it give the object a special shape?

2 What things can students find that have joints? (What things have parts that need to move?)

3 Ask the students: How do you know your bones are alive? Has anyone in the class ever broken a bone? What happened? If possible, show an X-ray picture of a broken bone. Do bones break easily? What can you do to keep your bones safe? (The most common childhood break is called a "green splint fracture." To demonstrate why, obtain a young green branch and an older branch from a nearby tree. Bend each one until it breaks. Have children compare and try to explain the difference in the way each bent and broke.)

4 Have the children draw around each other to make outlines of their bodies. Then have them drawn in their bones on the paper outlines, following a discussion of the bones mentioned in the program. Have them decide on one color for bones. Save the drawings for future additions as well as for growth comparisons later in the year.

HANDS

Concept 1-3

Summary of the Telelesson

A horse's hard hoof, a cat's skillful claw, a bear's heavy padded paw and the hand of man are shown to be similar in some way. But a man's hand is shown to be different in a very important way – the way he can use his thumb. An x-ray view of hand bones shows the basis for man's flexibility of movement. Pictures of many hands appear – to make things man needs to live, to make things beautiful to see and hear, and to do things children need and want to do. Finally, in a classroom participation game, hands "talk" without a word.

Follow-up Activities

1 Talk about animal "hands" (paws, claws) in more detail. Distinguish between hands and feet, but maintain the general principle that many animals have appendages comparable in some way to the human hand. Children will enjoy listing all the animals they can think of and discussing what kind of "hands" these animals use.

2 Counting bones: A contiputation of the anatomy exercise in the program will reinforce the idea that the large number of well-arranged bones in human hands is responsible for flexibility of movement. Feeling carefully, children can find many of the following: 19 bones arranged in five rows, four rows containing four bones and one containing three.

3 You will want to amplify the children's understanding by leading them to discover that bones provide structure and foundation but cannot work alone. What holds the bones together and gives them the power to bend and straighten? What part of the body guides the hands and gives them their orders? What external cover contains the hard bones and shelters them? What hard surface gives protection to man's fingers?

4 Repeat the program exercise in which the narrator binds his thumb to his hand with scotch tape and tries to grasp, pick up or pinch. If possible, leave the scotch tape on the children for a while during the day and talk with them about their experiences.

5 Encourage children to bring as many large pictures of hands doing things as they can find. Display the pictures as hands that make things, do things, create beauty and communicate.

HANDY HANDS

Concept 1-3

Summary of the Telelesson

An opening montage of children's hands encourages viewers to consider all the things their hands can do. Specifically, Louise demonstrates how hands have helped people communicate, build homes, grow food, tame animals, make tools, publish books and play musical instruments. She points out that without hands to do these things, "we might be living more like cows or kangaroos than human beings."

Viewers then are encouraged to study their hands to see why they are so useful. A slide tape shows a child trying to build a model dinosaur without using his thumbs. Louise points out that "doing things without using your thumb is like trying to see using only one eye. You can do it but it isn't easy."

Next, she concentrates on the bones and muscles that give hands their structure and allow them to move. Finally, she talks about the nerves that make it possible to know what things feel like. To illustrate this, Louise plays a game by herself, drawing objects out of a bag while she keeps her eyes tightly closed. In this way she identifies a stone, a furry doll, a pear, and some clay, but misses on a toy spider -- which she throws away in horror.

To compare human animals with other animals that have hands, Louise introduces a special visitor, a chimp named Joe, who demonstrates some of the things he can do with his hands and feet. Louise emphasizes that because Joe's brain is simpler than ours, he will never be able to do all the things a human child can do.

Follow-up Activities

1 Ask the class: Why does a chimpanzee need hands? How does he use them to stay alive? How are his hands like yours?

2 Discuss: How are your feet different from your hands? How are a chimp's feet different from his hands? Compare his feet with your feet. Whose feet are more handy? Explain. Compare a snake with a chimp. How does a snake "feel" about his world?

3 Have children describe what they could do with their hands when they were two years old. Four years old? Ask them to name one new thing that they've learned to do with their hands since coming to school.

4 Discuss: There are many things you do with your hands. For some you use both hands; for others, only one. Which hand do you prefer for eating? Which foot do you prefer for hopping? Are they on the same side?

5 Have students try buttoning and unbuttoning something without using their thumbs. See if the time required lessens with practice.

6 Collect items with different textures and shapes. How many can children identify, using only their sense of touch? Vary the activity by having blindfolded children identify a partner by touching his face and hair. Can they tell if a person is happy or sad in this way?

7 Set up a situation where one child is hidden from the group except for his or her hands. Have the concealed student try to communicate some simple charades.

8 Have the class make fingerprints or handprints. If magnifying glasses are available, use them to show how the prints of each person are different.

9 A guest on the television series "Zoom" reported his discovery that the V between the third and fourth fingers is wider on the left hand of right-handed people and on the right hand of left-handed people. Have children place their hands flat on a sheet of paper with their fingers stretched as far apart as is comfortable. Trace the V on each hand and measure the opening. Does this theory hold true?

Summary of the Telelesson

As the program begins, Tara and Frank are working on some marionettes. One of the marionettes has a broken string and so his arm won't move. "Strings make the marionettes move," says Louise, "but what about you? What makes you move?"

She explains that the human body has over 600 muscles to move its more than 200 bones. Circus posters of the Strong Man and the Fat Lady help illustrate that some people have more fat under their skin than others, and that some have larger muscles than others, but that everyone has the same number of muscles and bones.

The children are encouraged to test the movement of their arm muscles and to compare this movement with that of an earthworm. Both move by contracting and relaxing. A turkey wing is used to show what muscles look like and to illustrate how they must work together to move the bones.

The heart is given as an example of a very important involuntary muscle, which isn't attached to any bone, but is working all the time.

Follow-up Activities

1 Have students name some of the muscles they use better now than when they were babies. What has made this possible?

2 Ask students to name some persons whose muscles are much better trained than theirs (e.g., surgeon, trapeze artist, cowboy, farmer). Which muscles are most important to these persons? Why? The children may enjoy making a collection of pictures of people whose work requires them to keep their muscles in good condition. Or they may wish to draw their own.

3 Have children talk about the games they like to play. Discuss the muscles used in each. Which muscles are used most? Name those that are used voluntarily.

4 Ask students to name the muscle that never strops working, even when they are asleep (the heart). This is an example of an involuntary muscle.

5 Have children hold a heavy object in one hand with that arm outstretched. As they slowly draw this arm in, have them feel the muscle at the top of the arm with their free hand. How does it feel (e.g., tight, hard) while it is contracting? Point out that the muscle underneath the arm is relaxing. How does it feel?

6 If possible, obtain a chicken foot and expose the tendon that controls the bird's toes. Have the children take turns moving the foot by pulling and releasing (expanding and contracting) the tendon.

7 If possible, bring earthworms to class and let the children observe and comment on the way they move. Watch any other animals you may have in your classroom (snails, slugs, fish, ants, cats, gerbils). What parts contract and relax? What parts are used to move along? Which animal moves most like a human being?

WHAT ARE YOU MADE OF?

Concept 1-4

Summary of the Telelesson

The program opens showing Louise building a house of blocks. The house grows larger as she adds more blocks to it. "You, too, are made of little blocks," she informs viewers, "but your blocks are living blocks, tiny living parts called cells." The analogy of cells to blocks is continued throughout the program.

Using microscopic slides of rock salt, a snowflake, a plant leaf and human skin as illustrations, Louise tells the story of Robert Hooke and his work and of how these "little blocks" came to be called cells.

Using a large model of a cell, she points out some of its important parts: the cell membrane that is like a thin skin; cytoplasm, the watery, jelly-like stuff inside the cell with chromosomes floating around in it; and the nucleus, the most important part of the cell because it tells the cell what to do.

The children learn that basically growth occurs as cells are added. Val, a baby boy, is introduced. His body, like theirs, started from a a single cell and is growing by adding cells all the time. "Even right now he is growing into a man," Louise tells the children.

To help explain the process by which this kind of growth takes place (mitosis), a series of slides demonstrates what happens when a cell divides. A dramatic sequence of time-lapse photographs shows a cell actually dividing.

To show the viewers that their bodies have many kinds of cells, slides of cells from different parts of the body are shown. Students discover that bone, gland, muscle and liver cells do not look alike. A correlation between structure and function is suggested. But, the children are told, even though all cells may not look alike or have the same job to do, they are alike in one very important way: they all work together "to make you what you are right now . . . a beautiful bundle of billions of cells."

Follow-up Activities

1 Discuss: Why didn't anyone know about cells before the microscope was invented?

2 Have children bring in both a baby picture and a current picture of themselves. Make a random display and have students try to match the pairs.

3 Using a strong magnifying glass, children will be able to see the cells of an onion skin. Another experiment that helps show cell structure in plants is to stand a celery stalk in ink or colored water and watch the gradual staining of the entire stalk.

4 If a microscope is available and children are able to use it, have them look at a single hair or fingernail parings, and compare them with a bit of lining scraped from inside of the cheek. What differences can be seen?

SIDE BY SIDE

Concept 1-5

Summary of the Telelesson

The program begins in the classroom as the teacher is explaining about the systems of the body. During the explanation the focus shifts to Janet, one of the students, who is carried from the room into a fantasy where the systems "come alive." Six systems are characterized and they explain their individual functions and interdependence through various skits and song and dance numbers. The six systems are characterized as follows:

Brainerd T. Nervy - nervous system
Simon Sinew - muscular and skeletal system
Betsy Truehart - circulatory system
Andy Bellows - respiratory system
Juliet Cook - digestive system (stomach)
Tommy Trash - part of the excretory system

Follow-up Activities

1 Identify and describe each of the systems and/or organs mentioned in the program. Make a list and write it on the blackboard. Have the children stand and locate each of the following on their own bodies or on models -- heart, lungs, stomach, brain, bones and muscles.

2 Have the children play a "What Is My Name?" game. Ask for volunteers (if none are available the teacher will have to be the volunteer) to give detailed description of a particular system, organ or body part. The remainder of the class guesses what is being described. For example:

-- I am a part of your body that is harder than plastic, has over 200 pieces, grows with you and stays with you all of your life. What am I? (Skeletal system)

-- I work like a pump to transport the fuels your body needs to keep you going and growing. What am I? (Heart or circulatory system)

-- I am a part of your body that stretches and relaxes as you move and play and has over 600 parts. What am I? (Muscles or muscular system)

3 Why is the program titled "Side By Side"? Explain the interdependence of the systems by comparing the circulatory system to a transport system. The heart pumps blood through the vessels (circulatory system) to all of the cells of the body. Blood contains food (digestive system) and oxygen (respiratory system) which are necessary to sustain the life of the cells. The blood delivers this food and oxygen to the cells and picks up waste materials which are eventually passed through the body.

Summary of the Telelesson

Raggedy Ann and Raggedy Andy have sat on the shelf through lots of lessons, but they haven't learned anything. Why not? "Because," Louise tells viewers, "they are not living things with the ability you have to learn. They don't have the equipment you do for finding out about the world. They don't have your brain and sense organs."

Using a diagram of the human brain and its nerve network, Louise illustrates how messages from outside the body are carried inside to the brain. Camera techniques help the children understand that their brain is just a big ball of cells shut up inside their skull in the dark (screen goes black). It couldn't see anything if their eyes didn't send sight messages (picture returns) to it. It couldn't hear anything either (sound goes off) if their ears didn't send sound messages to it. They see and hear with their brain.

Next, she illustrates how their sense of touch involves their whole body. Touch tells them if something is hard, soft, hot, cold, rough, sharp, smooth, silky or painful.

Trying to guess what is in a paper bag, she shows how touch, taste and smell can sometimes be substituted for sight. She stresses how billions of messages go over the nerve network to the brain every day . . . some important and some not so important. If the sense organs stopped working, the messages would stop and the students wouldn't learn anything more. They would only know what they know right now.

To show what it would be like if the senses stopped sending messages, Louise climbs into a black box and shuts the door. While she is insisting "nothing is happening," a kangaroo appears and wrecks the room. Louise is upset when she sees the mess, but she is even more upset when she realizes that, because of the few minutes she wasn't using her senses, she will never know what happened.

Follow-up Activities

1 Discuss how the five senses are important to personal safety. (In traffic, fires, near hot stoves, tasting bad food)

2 Ask students: What are your favorite smells? Sounds? Tastes? Which do you not like? Do you know why you don't like them? Make lists of children's responses by categories. Are they fairly similar or is everyone different? As teacher are your personal likes and dislikes different from the children's?

3 Put a dozen familiar objects on a tray: an orange, blue car, yellow crayon, red block, green ball. Allow children to study the tray for 20 seconds. Then remove the tray. Ask them to describe what they saw including the color of each object. What sense did they use? What parts of their bodies helped? Did their message center store the information correctly? If not, why didn't it?

4 To show the relationship of taste to smell, gather small amounts of milk, water, salted water, maple syrup. See whether children can tell what they are tasting while their eyes are closed and their noses are pinched.

5 Fill a paper bag full of objects and see whether students can guess what's in it, using only their sense of touch.

6 Have the children, with eyes closed, identify separate sounds (a ticking clock or buzzing alarm, a ringing bell, a bottle of water being shaken, paper being crumpled, chalk on the board).

7 Blindfold the children one at a time and see whether they can use their sense of touch to tell where they are in the classroom and what objects they are near.

8 What sounds do the children hear after sitting absolutely still for 20 seconds? Try it again with eyes closed. Is there a difference? Why?

9 At story time read several stories that have "sense appeal" and discuss how sights, sounds, smells, touch and taste are used in them. Some suggested books are: Do You See What I See? and Do You Hear What I Hear? by Helen Borten. Katie and the Sad Noise by Ruth Gannett; Night Noises by L.V. Johnson; Too Much Noise by Ann McGovern; and The Little Woman Who Wanted Noise by Val Teal.

YOUR BUSY BRAIN

Concept 1-6

Summary of the Telelesson

"Did anyone ever call you a brain? What did they mean?" To help answer these questions, Louise reviews the things you use your brain for. She emphasizes that the brain needs special helpers -- the five sense organs -- to do its job. A set of riddles (e.g., "Whispers, speeches, shouts, and cheers . . . To hear them all just open your _____[ears].") and a dummy onto which Louise attaches the sense organs as she talks help demonstrate this important concept.

A diagram of the brain and nerve network shows that the brain is like a control center, receiving and sending messages all the time. Viewers join Louise in acting out what messages are received and sent when a fly lands on your nose.

The brain also stores information like a gigantic warehouse. It has a short-time memory for things you don't need to remember for too long and a long-time memory for things you need to remember -- things you repeat many times, like your name, address and telephone number.

One way all animals learn is by "trying and making mistakes and trying again." This is demonstrated by two rats (one trained and one untrained) making their way through a maze to get to some food. The connection between the sense organs and the ability of the brain to learn and remember is well illustrated by this demonstration.

Finally, a model of a brain is shown and described as being like a globe on which you can locate special parts -- clumps of cells -- that do special things. Louise uses the model to point out the different parts of the brain that would be working if you were standing on one side of a street and there was a popcorn vendor on the other. In reviewing this concept, she locates the three parts of the brain: the upper brain, the biggest part that lets you think and do things only a human animal can do; the middle brain, which keeps your muscles working together smoothly; and the lower brain, the oldest part, sometimes called the animal brain, because it is the part most like the brains of other animals. This part of your brain takes care of all the things your body is doing even when you are asleep: breathing, digesting, swallowing and so forth.

So Louise, says, "You really are a brain . . . your brain is you!"

Follow-up Activities

1 Ask the children to determine what messages they are sending to their brain right now.

2 Discuss: What messages do you think are received by the brain of a zebra being chased by a lion; a policeman helping children cross the street; you eating a hamburger? What messages are sent from the brain? (Zebra registers FEAR, brain says RUN, sending signals to legs, etc.)

3 Discuss: What would happen if you didn't have a long-time memory? Would you need to go to school? Why or why not?

4 List step-by-step a fairly simple activity, recording the messages to and from the brain that make that activity possible. For example, a sequence for picking up a pencil: see it . . . move arm . . . feel with fingers . . . move fingers . . . close fingers . . . raise arm. Have children figure out step-by-step the process for drawing a picture.

5 Have each child choose one animal and write, illustrate, or tell all the things that the animal can do. What can the child do that the animal cannot learn to do? What can the animal do that the child could never learn to do? Review which parts of the brain are involved in each type of activity.

Summary of the Telelesson

Viewers first see Louise upside down in a mirror. Then she appears as usual . . . right side up.

She tells the children that their brains are necessary to make her look like this (right side up) and that a person always sees things with the brain. She explains that she was showing them how their eyes work. Pictures get to your eyes in the first place by traveling on light rays. Your eyes see pictures upside down all the time, but your brain turns them around and makes them look the way they do.

Using an eye model, she then points out and describes the different parts of the eye -- cornea, iris, pupil, lens, retina -- and describes how each part works. The function of the eye muscles is discussed next, and the importance of not straining the muscles by reading in poor light is emphasized.

A series of slides tells the story of one girl's visit to an oculist, and how proud she is of her new glasses and happy that things no longer look fuzzy.

The sound of a fire engine leads to the discussion of ears. By plucking a large elastic band, Louise demonstrates that all sounds are made by something that vibrates (moves back and forth). A large ear model is used to show how sound travels from the outer ear down a tube through the ear drum, by three tiny bones that pass it along to a coiled tube in the inner ear and finally to the brain.

You see with your brain; you also hear with your brain. Glasses help people who can't see well. Hearing aids and lip reading are mentioned as two things that can help people who don't hear well.

Louise closes the program by emphasizing what a great team the eyes and ears are " . . . working together all your life bringing in the millions and trillions of sights and sounds that help make being alive the exciting thing it is."

Follow-up Activities

1 Ask children: How did you feel when the picture blurred during the program? What did your eyes do?

2 If children have visited an optometrist, have them describe their experience. Can they tell which parts of their eyes the doctor was testing in different parts of the examination?

3 Discuss: How do you feel (teacher silently mouths the rest of the question) when you can't hear what I'm saying? What do you do when sounds are too loud? When they are too soft?

4 Ask students when a sound becomes a noise.

5 Discuss: What kinds of noises bother you? Your mother or father speaking? Your dog? Why do you sometimes want to be quiet? What do you do? Where do you go? Name some places where you have seen "Quiet" signs. Why is it important to have it quiet in a library? Near a hospital?

6 Have the class play "Telephone" to illustrate the importance of listening carefully.

7 Have half the class cover their ears tightly. Make a very loud unexpected noise (cymbals, shrill whistle). Discuss what the two halves hear and how each reacts. What kinds of noise do we try to close out?

8 Have children pluck or play one of the following objects to demonstrate that sound is vibrations: kettle drum, door spring, guitar string, elastic band. Have children place a piece of wax or tissue paper tightly over their lips and hum. Do their lips tickle? Why?

9 Have the children cup their hands behind one ear and say something. (Singers often do this to hear how they sound.) Then have them hold their hands straight up and down beside their eyes to limit their vision to straight ahead. What happens? How is their sight or hearing changed?

10 Using an old camera, children can relate parts to the eye. Ask children to bring in photographs that didn't come out well and try to figure out what part didn't work properly.

11 To show how important it is that each person have aids that meet his or her special needs, have children who don't wear glasses carefully borrow from those who do and look through them. Children who do wear glasses might borrow each other's for the same reason.

EYES AND LENSES

Concept 1-6

Summary of the Telelesson

A visual journey of things the naked eye can see is followed by a simple description of how an eye works. Then man's inventiveness is celebrated with an introduction to instruments which allow people to see far beyond the limits of the naked eye. The camera shows how things look through eyeglasses, a magnifying glass, a microscope, binoculars and a telescope.

Follow-up Activities

1 Talk about different things the children can see with just their eyes and things they think they could understand better if they could make them seem bigger or closer.

2 Do people invent instruments to help them see better just for the fun of it? Encourage children to figure out that men needed to see better and worked hard to find ways in which they could. For example, men on ships at sea, doctors investigating germs, and people who want to travel in space all use instruments which help them to see better and gain needed information.

3 Have children work with available instruments to learn which make things seem bigger and which make things seem closer.

4 Discuss other inventions. What has man invented to allow him to get places faster than he can walk? What has man invented to carry his image from one place to another? What has man invented to carry his voice?

YOUR HEART - THE MIGHTY MUSCLE

Concept 1-7

Summary of the Telelesson

The lesson opens with a pulsing, thumping, mysterious sound, which turns out to be a recording of the beating of a human heart. With the aid of an X-ray, siphon pump and heart model, children learn where the heart is located, what it looks like inside and how it pumps blood around the body through a network of pipes, or blood vessels. The "tub-dub" sound the heart makes is caused by the opening and closing of its valves or little doors. An unusual film shows blood flowing through a capillary. Children are involved in finding their own pulse and the blood vessels that are easily seen near their wrists and further up their arms. Using a toy train as a visual aid, Louise explains how heart, blood and blood vessels (veins and arteries) work together to pick up and transport fuel, water and oxygen to all the cells in the body and then to carry waste away.

Follow-up Activities

1 Have students discuss: Why is a squirrel's heart smaller than your? Name some animals whose hearts are bigger than yours. When will your heart stop growing? Compare the size of your heart with that of an adult.

2 Discuss: Can your heart ever be broken or lost? Why not? What do songs about broken hearts or lost hearts really mean?

3 Have the children locate the pulse in their neck as they did while watching the program. In addition, have them find the pulse in their wrist and temple.

4 It is possible to make small individual stethoscopes. For demonstrations a very satisfactory stethoscope can be made from a small funnel, a plastic Y-tube and some rubber tubing.

5 Children can demonstrate the action of the heart by closing and opening their clasped hands in a basin of water. This is an activity that every child can do at home as well as at school.

6 Examining the network of veins in a leaf may help reinforce the child's mental image of his own network of blood vessels.

7 For a home activity, instruct the children to go into a dark room and look at their blood by holding their hands over a flashlight, by holding a flashlight behind their ear and looking in the mirror, or by putting the end of a small flashlight in their mouth. Make sure that the children understand that the blood is enclosed in blood vessels.

8 Children may want to add the heart and network of blood vessels to their body outline pictures, either directly or as an overlay. A diagram or model will be helpful to them.

9 Discuss, or if your children are particularly interested in the program, demonstrate with a closed circle of tubing filled with colored water how the same five quarts of blood go around and around in our bodies. A more sophisticated device could have the tubing connected at two ends of a plastic ball to show how the blood enters and leaves the heart.

TAKE A DEEP BREATH

Concept 1-8

Summary of the Telelesson

Early in the program, viewers are encouraged to run in place and then hold their breath. They discover it is not easy. What a nuisance it would be if they had to remind themselves to breathe! To illustrate how vital oxygen is, Louise deprives a burning candle of air and it flickers out.

Slides help show how people like astronauts and divers take oxygen with them when they go places where there is an insufficient supply. Because people must be able to breathe every minute of their lives, Louise stresses that children must never hide in small, tightly-closed places like a refrigerator or a chest. "After you used up all the oxygen, you would be in serious trouble."

Using a model, she explains how air is inhaled through the nose or mouth and moves down the windpipe. Children are encouraged to locate their windpipe and to feel the vibrations of their voice box when they hum or make a noise. A model is used to show how the windpipe branches into the lungs -- each twig-like tip covered with very tiny air sacs -- like an upside-down tree. The tiny pockets of air make the lungs soft and spongy like whipped gelatin or angel cake.

A film shows how fresh oxygen gets into the body through the air sacs and how used air is exhaled. To show the quantity of air that lungs can hold, Louise conducts an experiment, displacing water in a filled jar by blowing air from her lungs into it. She closes the program by illustrating one way used air can be useful -- by blowing out the candles on a birthday cake!

Follow-up Activities

1 Discuss: How do you breathe when you have a cold and a stuffy nose? When you swim?

2 Have students repeat the exercise that opens the program. Ask them why they breathed faster when running than now. Then explain why. (The body's need for more fuel during exertion requires more oxygen.) Why don't we breathe as fast when sitting quietly or sleeping?

3 Have children place their hands on their rib cages and take deep breaths, exhaling slowly. Can they tell what's happening inside when they do this?

4 Have one large child and one small child hold their breath as long as they can comfortably do so. Does size really make a difference? See how long children can hold a single tone when singing. Remind them to breathe deeply before starting.

5 Have children breathe through their noses. Pass a small mirror around the class so they can see the tiny hairs that help filter dust out to protect the lungs.

6 Demonstrate oxygen deprivation in the classroom with a candle and bell jar. Review the dangers of old refrigerators and chests.

7 Set up a lung capacity experiment similar to the one on the program.

MOVE THOSE MUSCLES

Concept 1-9

Summary of the Telelesson

As the program begins, several people are exercising: Louise is riding her bicycle, children are climbing rocks, swinging, playing jump rope. Playful kittens and a film clip of wild baboons show how animals spend time playing every day because, like people, they need exercise to build strong muscles.

But what is exercise, Louise asks? Using cartoons, she shows that to get exercise and build a strong body, you really have to move your muscles. Although relaxation is necessary it doesn't build strong muscles.

A diorama shows that early man had to be strong to survive. The children are told that although their brain is more developed than early man's, they have essentially the same kind of body, and that body needs exercise to be strong and healthy.

Babies exercise by stretching and wiggling. This exercise helps shape their spines. Pictures of a baby's spine are compared with that of an older child as Louise explains how the spinal curve enables humans to make special movements most animals cannot make.

Viewers are asked to demonstrate a very special thing human animals can do that other animals cannot do well: move upright on two feet. A film clip illustrates the easy swing of a gibbon moving through trees and his awkwardness when walking.

Three games that help children control and develop their muscles and are fun to play ("Freeze," "Duck Duck Goose" and "The Lion Hunt") conclude the lesson.

Follow-up Activities

1 Discuss: What do you teach your muscles in school? Finger, eye, arm, foot muscles?

2 What do students do at home that helps build strong muscles? Do they play the piano, beat eggs, wash windows, rake leaves, make their beds?

3 The next time your class plays one of the games shown in the program, ask students to tell which muscles are being exercised. When they are playing "Freeze," help them understand that muscles help hold the body in position as well as move it.

4 Have the children demonstrate stunts they enjoy doing and again note which muscles are of particular importance.

5 Discuss what kinds of games children play in other countries. Collect pictures of them. What kinds of games did children play long ago -- before there were television sets and bicycles?

6 Make a balance beam with a 2" x 4" beam nailed to two end blocks. The children should step off, not jump off, and try walking frontwards, backwards, sideways, singly, then in pairs. Raise it farther from the floor as the children become more proficient.

7 Dancing is good exercise. Make up stories for students to dance to or use Dance-a-Story records (Ginn, Boston, Mass.).

Summary of the Telelesson

Children at play, workers on the job, an athlete in training and a dancer in motion use similar movements for different activities. They express the energy, beauty and excitement of human movement. They run, walk, balance, leap and stretch. They bend, twist, turn, swing and pull. They jump, lean, push, twirl and rock. They move!

Follow-up Activities

This lesson is an encounter with movement and children will want to move when it is over. Try to provide space and opportunity for movement activities to whatever degree possible in individual situations.

1 Movement games:

a. Contrasts: One child shows a movement he likes to make and another child illustrates what he feels is the opposite movement; for instance, bending vs. stretching, pulling vs. pushing, jumping up vs. lying down, fast motion vs. slow motion, smooth motion vs. jerky motion.

b. Charades: The group guesses the occupation or the feelings of a volunteer "actor" by his pantomime movements.

2 Movement conversation:

a. Encourage children to talk about how it feels to run down the street fast and free, to stand on tiptoe and stretch their arms high, to roll fast down a hill, to walk back up the hill.

b. Discuss some of the ways mother moves when she cleans house. How does she move to make a bed? To vacuum? To get a can down from the top shelf? To iron a pair of long trousers?

3 Movement bulletin board displays:

a. Have the children draw original pictures of a person moving in some way. Use large size easel paper to allow movement to be illustrated.

b. Have the children bring pictures to class which show different kinds of people moving in a variety of ways.

PLAY AND STAY HEALTHY

Concept 1-11

Summary of the Telelesson

The telelesson shows that exercise and play affect one's total health and well-being. While this type of activity is normal and natural, it is also a necessary part of a child's physical, mental and social growth and development. The program illustrates how people are directly affected by the exercise they do and the games they play.

Follow-up Activities

1 The telelesson refers to the three components of physical, mental and social health. They are defined as:

-- physical health - the way the various parts of the body grow, develop, function and work together as a whole.

-- mental health - the way people think and feel about themselves.

-- social health - the way people think, feel and relate to others.

Exercise and play contribute to each of these three health components.

Physical health - The circulatory, respiratory and muscular systems are directly affected by exercise and play. During recess have the children engage in a set of rigorous exercise. Following this have the children note the following:

-- Did their breathing rate increase? If so why?

-- Did their heart rate increase?

-- Do certain parts of their body feel especially tired?

-- Which muscles were used in the activity?

Discuss the idea that through exercise and play all parts of the body develop to become stronger and more efficient.

Mental and social health -- Exercise and play also contribute to mental and social development. Set up a game or activity that involves teamwork. Following the activity have the children note how they felt about themselves and others.

2 Have the children draw a picture of a physically, mentally and socially healthy person. Have them tell a story about this person by answering the following questions:

-- What are his favorite activities?
-- What things does he do to remain healthy?
-- How does he feel about himself?
-- What does he like to do with his friends?
-- Is he well liked?
-- Does he have a lot of friends?

YOUR POSTURE - YOUR CHOICE

Concept 1-12

Summary of the Telelesson

The telecast defines posture as the way people sit, stand, walk or move. It's the position of all the parts of the body -- the way the body lines up.

But posture is much more than that. The relationship between self concept and posture is presented. How people feel about themselves is reflected in their posture. It talks. It tells others what people are feeling inside. When people feel good about themselves they want to look good and posture is one of the best ways of looking good!

Follow-up Activities

1 The telelesson presented the Two Steps to Perfect Posture.

-- Lift your head as far away from your toes as possible, keeping your chin tucked in.

-- Tilt your pelvis forward by tightening the muscles in your buttocks.

Reinforce these two steps. Set aside a few minutes each day and have the children stand to demonstrate the steps. Remind the students that good posture is a habit, a habit that will have life-long benefits.

2 Body alignment may be checked by having the student stand against a background that has horizontal and vertical lines. This may be accomplished by painting or drawing a grid pattern on a large piece of paper, on the chalk board or on the wall. Have each child stand against this grid and check the horizontal alignment of shoulders and hips and the verticle alignment of the spine.

3 The telelesson mentioned that most school classrooms are supplied with school- size furniture. However, since children and furniture both come in a variety of child sizes, have each student check to see if his chair or desk is the right size for him. For example, can each student sit with his back against the back of the chair and put both feet squarely on the floor? If not, perhaps a change of chair or desk is possible.

HOW DID I GET TO BE ME?

Concept 2-1

Summary of the Telelesson

Six-year-old Tony wonders if he would be the same or different if he lived somewhere else and in a different family. What if he lived in a crowded city? How about a farm? Would he be a different Tony? As he thinks, he goes about his busy day trying to make things happen in his own life. He tries to play with people who let him and some who don't, tries to make people happy and mad, tries to do something that demands courage and determination. All the time he is getting to be Tony.

Follow-up Activities

1 Baby picture display: A bulletin board of pictures of children in the class as babies can set the stage for serious thinking about "getting to be me."

2 List things that the children remember learning to do, or know that they must have learned even if they cannot remember – walking, talking, dressing, eating.

3 Have each child tell something that he would like to make happen soon. The happening might be learning a new skill or it might be getting an adult or a sibling to do something with him. Help the child state what he wants to make happen and to make a plan. Then, day by day, consult with him about his progress and encourage him to solve his problem successfully.

4 With reference to the idea in the program that each person is born into a particular family and place (city, farm or suburb) each child can develop a scrapbook that begins with his own baby picture. Then build the story with snapshots or personal drawings of family, house, pets, neighborhood and play activities. A third section of the book can consider other people a child might like to be and other places he might like to live.

5 Talk about "things I can't make happen." Why can't a child make this particular thing happen? Is he too small? Too young? Living in the wrong place? Have too many siblings? Hasn't really tried? Afraid to do it? Can the children in the class help each other figure out a way to make each other's things happen?

6 Using "dress-ups" and dramatic play, encourage children to act out the image they have of themselves as adults.

EVERYBODY'S DIFFERENT

Concept 2-1

Summary of the Telelesson

General differences in the sizes, shapes and colors of all human beings lead to discussion of differences in the way people can use their bodies. Some special problems that individuals have to solve if they cannot use eyes, ears, arms and legs the way they would like are explored by a man who cannot see, a woman who cannot hear well and a child whose metal body braces often get in her way. Determination and some special kinds of help provide the keys to success for these three people. A seeing-eye dog, a hearing aid, physical therapy and the confidence of friends are some of the aids shown in the program. The idea that people are people is developed through an intermingling of many people with and without special problems caused by physical differences, as they go about the daily business of eating, sleeping, working and playing.

Follow-up Activities

1 Encourage the children to talk about people they know who have special problems. How do they solve them? How does a child solve his own unique problems?

2 Have pairs of children role play. Have one child imagine himself as a person with a special problem, one which can be acted out, and the second child role-plays as his friend who wants to help solve his problem. How can the helping child best aid his friend with a problem? Teachers will want to guide children towards understanding that the kind of help needed is help towards independence. Doing things for a person is often not the best way to help. Finding a way to encourage a person to do something for himself is often the best kind of assistance.

3 An "Everybody's Different" bulletin board: Children find pictures which show how different people are from each other in physical appearance or in the way they use their bodies.

NO TWO ALIKE

Concept 2-1

Summary of the Telelesson

Louise and her guests, Greg and Gary (who are identical twins), are looking at baby pictures. Susie Snippit, a bratty puppet, pops up and claims that all babies look alike. Louise shows Susie pictures of babies who look very different from each other, and Susie begins to agree. . .until she gets a good look at Greg and Gary. Then Louise explains that, even though Greg and Gary do look just alike, they are in fact different in many ways. The boys show this is true by discussing some of their interests which are different.

After Greg and Gary leave, Louise reviews the many ways that individuals differ: size, shape, features, skin color, hair. She reminds children that each person is different because each began from a different set of genes in just one special cell; but identical twins like Greg and Gary, who have the same genes because they came from the same cell, and who look alike, become different by having different experiences. Slides of children living in different cultures (Arab and Eskimo) and in different environments (urban and suburban) help emphasize the importance of experience in shaping a child's life and personality.

Louise concludes that different experiences make persons different, and being different is what makes each person special. "I am the only ME, and you are the only YOU."

Follow-up Activities

1 Ask students: In how many different ways can you describe yourself? Examples: My name is _____. I am a member of this class; I am seven years old; I am Mrs. Smith's (son or daughter); I am a good runner.

2 If possible, invite identical twins in to tell: some of the funny things that happen to them because they look alike; the ways they're not alike in interests, reactions, likes and dislikes.

3 Have the children tell what they want to be when they grow up. At the end comment appreciatively on the variety of interests. Ask them to imagine what would happen if all boys wanted to be astronauts and all girls wanted to be nurses, or vice versa.

4 If possible, have several parents come in to talk to the class about their occupations and hobbies and why they chose them.

5 Collect and display pictures of activities of children in different cultures as well as in the United States.

ALL BY MYSELF

Concept 2-2

Summary of the Telelesson

Susie wants to bake a birthday cake for her four-week-old puppies – all by herself. With her mother standing by as assistant chef, Susie measures, mixes, sifts, squeezes and spills ingredients into the bowl and onto the counter with all the built-in intensity and joy of an eager five-year-old. Susie's face, as she admires her elegant pastry, proves that it's worth learning to do things – all by oneself.

Follow-up Activities

1 "What is something that you would like to learn to do all by yourself?" is a good question with which to begin. From children's ideas may come a plan for in-school activities involving trial, error and risk of failure. Cooking projects, building projects and learning new physical skills are three promising areas for do-it-yourself planning.

2 You can further discussion with these questions:

a. How can a grownup help you when you want to learn something all by yourself?

b. Can a grownup help you by doing something for you?

c. How did Susie's mother help her learn to bake a cake? How did Susie use her mother to find out what to do?

d. What happened when Susie broke the egg on the table? When she spilled the vanilla? When she flipped the milktop into the bowl? Did her mother get mad at her? Should her mother get mad at her for doing those things? How would she feel about baking the cake if her mother got mad?

e. Are you afraid to try new things sometimes because they are hard and you might make mistakes? Are mistakes good for anything? How do you feel when you make a mistake and they try again and don't make a mistake?

f. How do you feel when you learn to do something all by yourself? Can you think of something you have learned to do on your own?

LOOK AT YOU NOW

Concept 2-2

Summary of the Telelesson

Holding a worn photo album, Louise reminisces about her own children as babies. She reminds the viewers of some of the things they have learned to do since they were babies, like talking, writing and reading.

Watching a film of a baby being given a bath, she compares the children now with what they were like as babies. She talks about how helpless they were: unable to walk, talk, sit up, turn over or even hold their heads up; and how they needed someone to feed them, burp them, change their diapers, bathe them, dress them; to do just about everything for them. One thing a baby can do very well, she points out, is to cry to tell its family it needs something. But babies learn and grow very fast. A film is used to show the children some of the things an eight-month-old baby, Emma Kate, can do. Next, as the children watch a film of a seven-year-old boy named Davy, Louise reminds them of the many things they can do now that they couldn't do when they were babies – get dressed, get their own breakfast, help others.

At the end of the program Louise suggests that children make a picture of themselves doing one special thing they have learned to do this year (e.g., ride a bike, tie shoes, ski, swim), and title it "Look At Me Now."

Follow-up Activities

1 Make a list of special things children would like to learn to do this year. Set aside some time each day for these special pursuits.

2 Discuss: What are some of the things you can do now that your baby brothers and sisters can't do? What are some of the helping things you can do for babies? What are some of the things you still need help doing yourself?

3 Set up helping teams. Be sure that each child is allowed to help with something that he or she does well. Each child should also be helped with something.

4 Measure the heights of all the children in the class at specific times during the year and make a chart to show how all children grow at different rates. Discuss: If you were 18 inches long at birth and then kept growing at the rate that a baby grows (about an inch a month during the first year), how big would you be at age six? Lead children to see that, had they grown at that rate, they would now be more than six feet tall. How tall would they then be in five more years? Ask the children to do the same for their weight. Have them find out how much they weighed at birth, and then ask them to determine how much they would have weighed at five months on the basis that a baby doubles the birth weight in five months. Help them figure out that, had they continued to grow at the same rate, they would have weighed almost a ton by the time they were three.

5 Have students find out how long they were when they were born, and cut strings to those lengths. Have they grown twice as big?

6 Read portions of *Tom Thumb* or *Alice in Wonderland* to illustrate how babies must feel in the large-scale world around them.

7 Have children cut out or draw pictures of things they can do now and make a "Look At Us" mural or frieze.

8 Discuss: Have you ever held a small baby? How did you feel? How do you think the baby felt?

9 What do children think makes a baby cry? What makes a baby happy? Do the same things make them happy or unhappy? Why or why not?

10 Small babies know how to cry to let people know when they are unhappy. Besides crying, there are two other special things babies are born knowing how to do. One has to do with eating. Can children guess? The other is something very special they can do with their hands. Suggest that the children ask someone with a newborn baby to let them place a finger on the baby's open hand. What happens?

FAMILY PORTRAIT

Concept 2-4

Summary of the Telelesson

Families are different. They come in various ages, sizes, kinds, shapes, types and colors.

Families are also alike in some respects. They are alike in three general functions: providing physical care; nuturing personality growth; and meeting emotional needs. The lesson presents the many ways that different families meet these three similar functions.

Follow-up Activities

1 Families are alike in their similarity of functions. Use the transparencies in Appendix B and have the children tell or draw pictures of ways that their family performs the following functions:

Provide physical care (shelter, food, clothing)

Nutures personality growth (development of morals, attitudes, values)

Meets emotional needs (love, friendship, sense of belonging)

2 Although families are alike in their general functions, they vary greatly within those functions. Have each child tell something that he feels is unique about his family. This may include a comment about a family member, family customs or special family activities.

3 Specific needs also vary greatly among families. Make a list of family needs and have each child react to each statement according to his own specific family situation. A list might include such statements as:

All families need a house.

All families need food.

All families need a pet.

All families need two cars.

All families need a grandmother and grandfather.

All families need clothes.

All families need a brother and sister.

All families need a mother and father.

4 Have each child make a poster that describes his family. Have the students draw or cut out pictures from magazines and make a collage that illustrates the various members of their family, their home, their favorite foods and their favorite activities.

EVERYBODY ELSE AND YOU

Concept 2-4

Summary of the Telelesson

This program examines the similarities and differences in family life and culture in many countries around the world.

The camera finds Louise behind a screen – barefoot, dressed in a sarong and blouse, and eating fish and rice with her fingers just like a Malaysian. She narrates a film about Mukah and his sisters, who live in Malaysia, and points out characteristics of their school, clothes, animals and activities. Viewers also see a model of a Malaysian house, built of teak and palm leaves and resting on stilts. Louise points out that the house is perfectly suited to the weather and needs of people in Malaysia.

Turning a large globe, Louise explains that there are more than four billion persons in the world, all with real names, faces and feelings, and that all of them are important. She locates the United States and Malaysia, and narrates a series of photographs showing the activities of children who live in other parts of the world, and of Eskimos and Navahos who live in the United States. She emphasizes that families all over the world help their children learn the things they need to know to grow up in their particular culture.

Louise encourages the viewers to understand that all of the four billion persons in the world are relatives of theirs because they are all human. And even though they do have different genes and live in different ways, they all have the same basic human needs.

Follow-up Activities

1 Following the lesson, discuss with the children all the ways they think they and their four billion relatives are alike and how they are different.

2 Discuss: How do you help your family? How does your family help you? How do children in other countries help? How did Mukah help his family? Why would you like to live in Alaska? Why not? Why would you like to live where it's very hot all year? Why not? What ways would you help your family in these places?

3 Have children consult pictures and books about other cultures. Use the children's drawings to make an international collage of different customs, habits, and foods.

4 Invite parents who have traveled or lived elsewhere to visit the class to talk about other countries.

5 Have the children make a display of items from other countries that they might have at home.

WHAT ARE FAMILIES FOR?

Concept 2-5

Summary of the Telelesson

Louise opens the lesson with a series of short films about geese, baboons and lions, pointing out how different animal families feed, protect and care for their babies and teach them what they need to know to stay alive.

She then asks, "What is your family for?" She explains that, in addition to caring for babies, families are "for doing things with – for having fun with." Viewers see pictures drawn by some second graders of things they do with their families. Louise points out that families are also for helping each other, and shows several cartoons of children trying to help with home chores, but not being very successful. She explains that helping really is important, especially in large families or in ones where both parents work.

Using dolls to illustrate, Louise shows different groupings of people that make up a family: A family can have a mother, a father, a brother, a sister and pets; or, a family might have twins, a baby and adopted children. Louise reminds children that adopted children do not have the same genes as their adoptive parents, and so they may not look like their parents. A family sometimes has grandparents in it, or perhaps only one parent. Sometimes one parent is dead or the parents are divorced.

When parents get divorced, Louise tells the viewers, children sometimes feel that it is their fault; but she explains that this is not true. She points out that even if you have a parent who doesn't live with you, it doesn't mean that this parent doesn't love you. She makes it clear to adopted children that they are indeed special: "You know you are wanted very much because your parents chose you especially to be part of their family."

Louise emphasizes that no matter who the people are in the family, the fact that they are a family makes them different from any other group of people. They are people who have fun together, help each other, talk things over and even fight. But, she says, family fights are soon forgotten, and the good feelings of loving and caring and sharing and sticking up for each other are the feelings that matter. This is what makes a family "special people who belong together."

Follow-up Activities

1 Review the children's drawings and encourage them to talk about their families. Is there any family member they've left out? How many different activities have children shown? What are some other things families like to do together?

2 Review the question that titles the program: "What are families for?" Another way of asking this is: "What is a family?"

3 Have children consider: Are all the families in the class alike? How many families have two persons? Three persons? And so on. Does anyone have grandparents living with him or her? Aunts? Uncles? Special friends? Are pets like members of the family? In what way?

4 Discuss: What special things do you do for your family? What do the people in your family do for you?

5 Divide the class into make-believe families of different sizes and structures. Assign simple family situations to each group (e.g., shopping, cooking, cleaning). How are household responsibilities divided in different families?

6 Have children role play: a) how parents feel when children don't do their chores; b) how children feel when parents have no time to play; c) siblings arguing over a toy; d) a time when a family is together; e) what happens when somebody in the family is angry.

7 Divide the class in half, and ask each half to complete one of these stories: a) I need my family because. . . b) My family needs me because. . . Compare the results.

DAD AND I

Concept 2-5

Summary of the Telelesson

Steve and his dad enjoy an autumn afternoon of fishing at historic Bull Run in Virginia. Secrets of the ancient sport pass pleasantly from father to son as Steve learns to find and dig worms, bait his own hook, cast with a spinning reel, catch, string, clean, cook and eat the fish.

Follow-up Activities

1 Encourage children to talk about enjoyable things they have done with adults. Why was a particular experience fun? What were some things that Steve and his dad said or did that made their day together a nice one?

2 Encourage children to talk about skills they have learned from adults. What did Steve's dad teach him about catching, cleaning and cooking fish? Did Steve learn the safe way to do certain things that would be dangerous if they were not done correctly (baiting hook, casting, building fire, cleaning fish with a knife, cooking on an open fire)?

3 Encourage children to talk about what they would like to do with adults in the future. Why would a particular experience be fun? Would it produce a good feeling? Might some new skill be learned? What special skills do mothers, fathers, sisters, brothers, teachers or adult friends have that would be good to learn?

FRIENDS

Concept 2-6

Summary of the Telelesson

Children in a kindergarten classroom describe "being friends" in terms of their own experiences at school – laughing together, talking on the phone, helping somebody with a hard job, teaching somebody something that he wants to know. They also think about not being friends and the way it feels when somebody's "just plain mean." How to make a new friend, whether one always needs a friend to have fun, and whether grownups can be friends are other ideas explored.

Follow-up Activities

1 In a general discussion, children may want to give their own ideas of what it means to be friends and how it feels to have a friend or be involved in unfriendliness. Does everybody feel unfriendly sometimes?

2 Each child may want to have a "Friends" book in which he pastes pictures of friends doing things together, draws pictures of friends, or, for older children, writes stories about friendly and unfriendly experiences.

3 Colors of friendship: Have children paint abstract pictures of friendly and unfriendly feelings, letting colors tell the story. Is an angry color different from a sad color? Are there quiet friendly colors and loud noisy ones? Is a noisy friendly color different from a noisy unfriendly color?

4 Volunteers in small groups may want to put on friendly and unfriendly plays for the larger group in which the children themselves invent dramatic situations.

5 Do children think grownups can be friends in the same way that children are friends? Is there a difference between "friendly" and "friends"?

EVERYBODY NEEDS A FRIEND

Concept 2-6

Summary of the Telelesson

Louise is playing with a china tea set that she has found in her attic. Seeing it makes her remember all the things she used to do with Sally Ann, an imaginary friend she had when she was a little girl. She explains that many children have imaginary friends. Imaginary friends can be fun and comforting.

But everyone needs a real friend, too, Louise points out. She asks, "How do you go about making new friends?" Several puppet plays show viewers how not to make friends: name-calling, grabbing, leaving other kids out of games, bragging, boasting. These plays are followed by a play that shows some good ways to make friends.

Louise explains that friends aren't perfect: they do make mistakes and they do get angry at each other sometimes, but getting angry doesn't mean they're not friends any more. She recommends that whenever friends get angry with each other, they talk about what made them feel that way.

Some people don't make friends easily because they are shy. Many people are shy, Louise explains, but if you remember that, it will help you forget your own shyness.

She also points out that friends can be any age, size or shape. At the conclusion of the program, Louise reminds the viewers: "To have a friend, you have to be a friend."

Follow-up Activities

1 Have students talk about times they got mad at their friends. How did they make up?

2 Discuss: What does it mean to be a good friend? Tell a story about a time you were a good friend. Tell a story about a time when someone was a good friend to you.

3 Discuss: Do you have a friend who knows things about how you feel that no one else in the world knows?

4 Have children role-play some situations that show friendly behavior and unfriendly behavior.

5 Discuss sharing secrets as one ingredient of friendship.

6 Discuss: How do you feel when someone calls you a name? Is it true that "names can never hurt you"? How do they hurt? What can you do or say the next time someone calls you a name? (Being called a name is often a crushing experience for a child. Help children realize that a name-caller without a victim is powerless. Role-playing name-calling situations may help them see that ignoring or walking away from the name-caller does work. You may wish to take the problem a step further. What makes people call other people names?)

RULES, RULES, RULES

Concept 2-8

Summary of the Telelesson

The lesson centers on the theme that people must respect the rights and property of themselves and others.

Rebecca Witch and Oliver Owl help Percy Pig and his friends understand common courtesy, why there are rules and what it would be like to live in a world without rules.

Follow-up Activities

1 Have the children try to put themselves in another's place. Discuss or dramatize the following situations:

-- Your father has just narrowly missed running over your bicycle which you negligently left in the driveway. What would your father say? What would he do?

-- Your mother has told you to come straight home from school. On the way you get side-tracked and she has to come looking for you. What will she say to you? Will you be punished?

-- You have promised your teacher that you'll have your assignment in by today. When you get to school you suddenly realize you have forgotten your work. What will your teacher say? What will she do about your work?

2 Ask the students to define courtesy. Give examples of courtesy. When do people need to be courteous? Who needs to be courteous? What can happen if children don't behave in a courteous manner?

3 Ask the children to name as many home and school rules as they can. Write these on the blackboard. Go through the list and get a class reaction to the following:

Identify the good rules. Why are they good?

Identify the bad rules. Why are they bad?

Identify additional rules that students would like to have initiated.

Who follows rules? Do parents? Do teachers?

YOU AND YOUR FEELINGS

Concept 2-9

Summary of the Telelesson

As the lesson begins, Louise is finger painting. She tells viewers that the smooth and squishy feelings they get while finger painting are the kind of feelings they feel through their nerves; but the kind of feeling they get when they are happy is another kind of feeling that comes from inside. Marvin Meany, a puppet, shows how easily feelings can be hurt when he criticizes Louise's painting. Louise asks the chidren whether their feelings would have been hurt by Marvin's remarks. She then points out that, because everyone has feelings that can be hurt, each of us should be careful not to hurt another's feelings.

Using examples from her childhood, she talks about feelings she has had that other people have had also. These feelings include anger at the bratty behavior of her sisters, silly feelings that everyone has sometimes, sadness over the death of her pet turtle and loneliness when a friend moved away. These feelings, Louise points out, are common to boys as well as girls. "Big boys do cry." A sequence of pictures of a little girl's first day at school demonstrates how a person can have mixed feelings, especially in a new situation.

Louise points out that grown-ups have feelings just as children do, and describes the love she felt when her daughter made her a notebook with "I love you, Mommy" written on it. She concludes by saying that "love is a very special feeling, probably the best feeling in all the world."

Follow-up Activities

1 Ask children to consider: What is the happiest day of the year for you? For other persons in your family? Can you name three things that make you feel happy?

2 Discuss: Why is being angry or cross all the time not a good way to be? What are some things that make people angry or cross? What makes you grumpy or cross? (A toothache? Stomach ache? Not winning a game? When someone breaks something of yours? When someone scolds you?)

3 Ask students to talk about a time they were afraid. Discuss: Is there anything you once used to be frightened of, but now you're not? What do you want to do when you're afraid? Run away? What helps you to get over being afraid? Is it good to be afraid sometimes? What are some things you should be afraid of? (Fire, strange animals, deep water, cars.)

4 Choose some children to role play simple situations that: a) make people feel good; b) make people feel bad. Do b) again, this time have the children try to make the people they've hurt feel better.

5 Ask children to explain: What do we mean by "mixed feelings"? Can you feel two different ways about a thing at the same time? Did you have "mixed feelings" the first day you came to school? How did you feel the first time you stayed away from home all night? The first time you went to a party?

6 Pose simple situations that children can react to such as the following: Sally's brother jumped on her hard to wake her up, and shouted, "Lazybones! Boy! Will you be late to school!" Then he beat her to the bathroom and stayed there forever. She finally went to breakfast with her hair unbrushed. Her mother took one look and said, "You didn't even brush your hair yet?" How did Sally feel by now? Have the children retell the story so that Sally is happier.

7 Have the children draw pictures of some event that makes them feel happy. Another day they can draw what makes a teacher feel good or a mother feel sad.

EVERYBODY IS AFRAID SOMETIMES

Concept 2-9

Summary of the Telelesson

Louise wakes up from a nightmare and shares her fear with the viewers. She points out that being scared isn't a pleasant way to feel, but explains that everyone is afraid sometimes (even those who claim not to be).

The viewers see a tape of pictures drawn by children of their own age, that show some things other children are afraid of. They listen to what these children have to say about their fears, real and imaginary. Then Louise tells viewers that when she was a little girl, she imagined there was a monster in her closet that would come out whenever her mother turned out the light. (Just for fun, the camera produces the monster.)

Although being really afraid can make you uncomfortable, Louise reminds the children that sometimes it is fun to be afraid (as at Halloween or on a scary carnival ride). You can enjoy yourself because you know that no real harm will come to you.

Louise tells the viewers that they have always been afraid of something. One thing they were afraid of as babies was strangers. She uses this opportunity to remind them of Dora Dingbat's frightening motorcycle trip, and cautions them never to go anywhere with a stranger: "You could meet someone who means to do you harm."

Next Louise talks about fears they may have that they can't draw pictures of, such as getting a poor report card, making a mistake, being laughed at, getting lost, being unjustly punished, having no one to meet them when they get home from school. These fears are enemies: they make people very uncomfortable.

Then Louise describes to the children how their bodies may react when they are afraid. (You may tremble, sweat, cry, giggle, scream, be sick to your stomach and even wet your pants.) She ends the program with a discussion of something they can do about any fear they have: "Talk it over with someone." Someone who cares will help you.

Follow-up Activities

1 Ask children to explain the phrase, "It's better to be safe than sorry."

2 Have students tell what was the scariest place they have ever been in. What made it feel scary?

3 Have children decide what some situations are that they should be afraid of.

4 Create a scary class story. Start off with a few sentences, then let each child add to it. Have children illustrate their own parts of the story; and, if the class feels ambitious, turn the whole project into a scroll to present to other classes.

5 Have different groups of students finish different sentences. For example, I get mad when _____; I feel sad when _____; _____ makes me happy. Make mad books, sad books, lonely books, scary books.

BERTIE AND STAN MICROBE

Concept 3-1,2

Summary of the Telelesson

Tiny living things, called microbes, are everywhere. They are too small to be seen but are a normal and natural part of the environment.

Microbes exist everywhere -- in the air, in water, on people and inside them. Helpful microbes such as the bacteria in intestines which help digestion of food, are discussed. There are also harmful microbes, which are generally called germs, which if they enter the body can make it ill.

The lesson concludes that though germs are everywhere, there are certain health practices that can help prevent and/or control the spread of disease.

Follow-up Activities

1 The telelesson emphasized the many germs or communicable diseases, that occur among school children. These include such diseases as:

chicken pox	strep throat	measles	pink eye	small pox
scarlet fever	impetigo	mumps	tetanus	polio

Many children have either had these diseases or have been immunized against them. Now is a good time to bring the students' health record up-to-date. Ask for parental assistance and have each child record those diseases he has had and those he has been immunized against. If possible ask the school nurse to review these records and, if necessary, consult with the student and parents to make the shot record current.

2 Antibiotics such as penicillin are made from a type of microbe called mold. Mold can be observed by conducting an experiment. Moisten a slice of bread and let it stand in the open air for an hour. Then wrap it in aluminum foil. In a couple of days look at the bread. With a magnifying glass, watch for the white mold that appears first. Continue observation to see if little black spots containing spores appear (this part of the microbe can resist adverse environmental changes).

3 Create a puppet dramatization to present diseases that are familar to the students. Paper bag puppets can be created to illustrate effects and symptoms of particular diseases (e.g. red spots, swollen eyes, flushed checks, pink or bloodshot eyes). Ask the children to use the puppets to tell stories about their experiences with illness and to demonstrate particular health habits that should be observed when they are ill or when they're around someone who is ill.

SNEEZLES, WHEEZLES AND MEASLES

Concept 3-2

Summary of the Telelesson

The lesson is about germs. Louise has a cold and Iris the Virus, a humansized puppet, brags that she gave it to her. Then, while Louise pretends to know nothing about germs, Iris expounds on their various characteristics: how they cause disease, how tiny they are, how they can be spread around and how they can get into the body.

When Iris goes away for a few minutes, Louise confides to viewers that Iris was telling the truth in saying that germs are everywhere. She then explains that people aren't sick all the time because many of the "bad guys" like Iris and her friends are killed by "good guys" called antibodies.

Louise discusses where these antibodies come from, what they do and how they stay in the body to prevent reinfection. Pointing out that the body also has other "good guys" to help keep out the "bad guys," she describes the body's first line of defense against virus invasion – the skin, the sticky coating in the nose and mouth and the fluid in the eyes.

If all these natural defenses aren't enough, she explains, doctors can help by giving medicines and shots. At the sight of a large needle, Iris the Virus (who has been lurking in the background), makes a rapid, hysterical exit.

Louise points out that although shots do hurt somewhat, the pain only lasts a second, while being sick in bed often lasts for days. She explains that the shots doctors give are often vaccines, which prevent some virus diseases (e.g., measles, mumps, whooping cough) from ever occurring by supplying the body with enough antibodies to protect it from these particular germs.

Although there is no vaccine for the common cold (and once you get one, there is no fast way to get rid of it), Louise tells the children there are ways to avoid getting a cold and to keep it from spreading to other people. She asks viewers to join her in reciting a pledge to remember to wash their hands, keep their fingers out of their mouth, not to share food, to cover their mouth when sneezing and coughing, to avoid others who are sick and to help other people stay well.

Follow-up Activities

1 Discuss some of the following questions: Why should you cover your face when you sneeze? Why don't you want someone to cough in your face? Why should cuts and scrapes be washed? Why do people take showers and baths? Why should you wash your hands before eating and after using the toilet? Why shouldn't you take bites of someone's apple or give someone licks of your lollipop?

2 Talk about common diseases. How many can the children name? How many have they had? Be sure children understand that even if they take all the proper precautions, they still can get sick. How does your body let you know you are sick? How do different diseases make you feel sick in different ways?

3 Discuss: How can children help themselves get well when they have a cold? Is it wise to stay home when you are sick, to go to the doctor, to take medicine, etc.?

4 Pass mirrors around so each child can see the fine hairs in his own nose that trap dirt and germs. Remind them about the "sticky stuff" and what it does.

5 Children can check their own fingernails by pressing a tissue under the nail. How clean are their nails? Why is it important to keep fingernails clean? To wash hair often? To get enough rest and sleep? To exercise outdoors? To eat balanced meals? Help them understand why a strong, healthy body is better equipped to fight germs.

6 To demonstrate antiseptic control, have children contaminate agar in sterilized petri dishes by rubbing dirty fingers over one plate, coughing over one, rolling a pencil eraser over a third. Place these plates in a warm, dark place for several days. Reserve one uncontaminated dish as a control. When the culture can be seen without a microscope, rub a piece of antiseptic-soaked cotton across part of the culture so the children can see what happens to the whitish patches.

7 Place a small amount of hay in one inch of water in a jar and observe closely for several days. Also, look through a microscope at a drop of water. Are there any one-celled living things there?

8 The children might create stories or act out a play about germs versus antibodies.

Summary of the Telelesson

The lesson presents the concept that a minor illness or injury can become a serious medical problem if mistreated or neglected. Situations are identified which require medical care and attention.

Various factors that influences people to allow a medical program to be mistreated or neglected are discussed.

Follow-up Activities

1 Set up a role play situation such as the following: Johnny is recovering from a cold. It's his first day back to school and he's been instructed by his parents to come straight home from class. However, his friends want him to stay and play football. He tells them he can't but they insist he's needed to make up the team. It's just a dumb, old cold. What should Johnny do? What are his choices? What would you do? Have you ever been in a similar situation?

Summary of the Telelesson

Alan knows something is wrong with him but he isn't sure what. He wakes in the morning happy and excited about the big play at school. Yet, something is wrong; he feels "funny." He's a little dizzy and his stomach and head ache. He considers telling his mother about his changing feelings but decides against it. "I'm just a little nervous" he tells himself. "I'll probably feel better later."

The day continues but so do Alan's changing feelings. As the children gather for the final practice of the play Alan learns that Susan is missing and won't be at school for the play because she is ill. Alan passes up an opportunity to tell his teacher about his feelings for fear of being forced (like Susan) to miss the play. The program ends with Alan feeling very confused and undecided about how to deal with these feelings.

Follow-up Activities

1 Have the children facially demonstrate various feelings such as happy, sad, frightened, angry, tired, frustrated, nervous. Ask for volunteers to act out these feelings and have the rest of the class identify the feeling they are portraying.

2 Discuss the following questions concerning the telelesson:

What is wrong with Alan?
What were some of Alan's physical feelings?
What were some of Alan's emotional feelings?
Should he have told someone (his mother or his teacher) about his feelings?
What would you have done in a similar situation?

3 Help the children identify with Alan by describing the feelings (emotional and physical) they have experienced when ill. Make a list of these feelings. Discuss ways that these feelings can be eased. For example, physical feelings (headache, stomach ache) can be helped through medication and rest. Emotional feelings connected with illness, such as being depressed or frightened, can be helped by talking it out with someone.

IF YOU GO TO THE HOSPITAL

Concept 3-6

Summary of the Telelesson

The sound of an ambulance siren introduces the subject of this program. Louise talks about the reasons people have for going to the hospital: because they have an emergency or an accident, or because there is something wrong with their body machines that can't be fixed or observed in a doctor's office.

To show hospital procedures, Louise narrates a slide story of Jonna Eller's stay in Children's Hospital in Boston where Jonna went for an operation on her knee.

The first part of the narration covers Jonna's feelings about going to the hospital and the details of her admittance. Viewers watch Jonna as, after her mother signs the admittance papers, she has an arm bracelet put on for identification, plays in the waiting room, and has her temperature taken with a modern electronic thermometer.

Viewers accompany Jonna to the laboratory where a lab technician wraps a piece of tubing around Jonna's arm, wipes her arm with antiseptic, and takes a blood sample. This hurts a little, but it is necessary, Louise explains.

Now Jonna is a patient. More slides show her in her hospital bed, wearing her hospital johnny, having lunch, playing a game with her mother, seeing her doctor and going off in a go-cart to have an x-ray of her knee. Although having x-rays made her feel a little afraid, it didn't hurt at all.

The next morning, Jonna, after being given medicine to make her sleep, is put on a traveling stretcher and wheeled to the operating room. The actual operation is shown in a speeded-up film followed by slies of Jonna back in her room with a cast on her leg and a tube taped to her arm. Louise explains that the tube is to feed Jonna through her blood vessels and assures the children that it doesn't hurt.

The rest of the narration is about Jonna's recovery period, which is a pleasant time.

Finally, as Jonna walks out of the hospital on her crutches, Louise tells viewers that Jonna is now completely well, and thinks back with good feelings about her hospital visit. A hospital, Louise concludes, is a good place to go to get well.

Follow-up Activities

1 In most classes there will be at least one child who has been in the hospital. In many communities the children regularly visit the clinic at the hospital. Discuss with students the similarity between what happens when they go for a checkup at the doctor's office and when they must go to the hospital. Help children to understand that most children and adults are apprehensive about going to the hospital.

2 Encourage children who have had hospital experiences to tell about them. Most children are much more frightened before they go to the hospital than after such an experience.

3 Discuss: What might be sent to a friend who is in the hospital?

4 Check with your local children's hospital to see if they allow children to come on guided tours. If so, arrange a class field trip.

GOING TO THE HOSPITAL

Concept 3-6

Summary of the Telelesson

This program is paired with "Overnight at the Hospital." Chris tumbles headlong from a tree and rides to the hospital in a wailing ambulance. Though pale and scared, he questions those attending him. As he is examined, x-rayed for a broken ankle and concussion, wrapped skillfully in a wet plaster leg cast, and fitted with a hospital bracelet for an overnight stay, he gains from the efficient adults around him the information he needs to cope with the dramatic change in his life.

Follow-up Activities

1 Children will probably lead the way to discussion. Through their questions, you will be able to clarify confusion and correct errors that emerge concerning hospitals. Because of the emotional involvement surrounding hospitals, the discussion will probably allow you to deal with a multitude of fears.

2 Some questions you may want to ask: Why was it so important for Chris to ask questions? What other questions would you have asked if you were Chris? Why does asking questions make you feel better?

3 Dramatic play: You may want to provide time for skits about "Going to the Hospital," and a supply of materials such as stethoscopes and bandages. Small groups can be encouraged to make up their own hospital stories.

OVERNIGHT AT THE HOSPITAL

Concept 3-6

Summary of the Telelesson

This program is paired with "Going to the Hospital." The quiet, slow rhythm of life in a hospital bed contrasts sharply with the busyness and excitement of the ambulance, x-rays and plaster casting that filled Chris's life a few hours earlier. Chris meets other hospitalized children, learns to swallow a pill, is delighted to be offered a Coke (but scared to call the nurse when he spills it) and likes a visit from his dad that includes a present. It's not so much fun when parents go home, the lights go out, the nurse is gone, the other kids are asleep – and Chris is lying alone, wide awake in the middle of the night. He figures out a way to get company that will help him fall asleep.

Follow-up Activities

1 Some questions you might want to ask:

   a. Why couldn't Chris fall asleep? Why didn't he call the nurse right away? How did the nurse help him fall asleep?

   b. What are some experiences that children in the class have had sleeping away from home or being without their parents?

SMILE YOUR TEETH ARE WORKING

Concept 3-7

Summary of the Telelesson

Various kinds of animal teeth are used to introduce this telelesson. The teeth of most animals are adapted to meet specific requirements.

Human teeth also have certain functions. These include chewing, speaking and helping form facial appearance. The lesson emphasizes that in order for teeth to continue functioning properly, people must follow a good dental program of proper brushing, good diet and regular visits to the dentist.

Follow-up Activities

1 Teeth of various animals have been adapted in order to meet specific requirements such as diet, protection and specialized work. Make a list of animals and have the children discuss the structure and function of their teeth. For example, dogs need specialized teeth for tearing food, chewing bones and for protection. Rabbits have teeth which are adapted for tearing bark from trees and for protecting them. Squirrels' teeth are used for gathering and cracking nuts and for protection.

2 Teeth are sometimes used in ways for which they were not intended. Have the children give examples of ways teeth are misused. This may include biting hard objects, chewing pencils, cracking nuts and opening bottles. Discuss the possible dangers to the teeth.

3 Three main steps that should be followed for strong, healthy teeth: Daily brushing or flossing; A proper diet that is low in sweets; and Regular visits to the dentist.

An additional aid to dental health is fluoride. Discuss this mineral which helps to make teeth stronger and more resistent to decay. Have the students respond with "yes" or "no" to the following statements. Parental assistance may be necessary.

- I drink fluoridated water
- I use a fluoride toothpaste
- I take fluoride tablets
- I have regular fluoride treatments at the dentist.

GOOD MOUTHKEEPING

Concept 3-8

Summary of the Telelesson

A set of clacking, chattering teeth introduces the subject of the day: tooth truths for good mouthkeeping. Slides are shown of several children, each with one or more teeth missing. Using a model, Louise explains why losing baby teeth is nothing to worry about.

She shows how babies, although usually toothless, have toothbuds hidden in their gums. They are called toothbuds, she explains, because they grow into teeth just as flower buds grow into flowers. They surface one by one until a child has all 20 teeth; then they start falling out.

Louise demonstrates that baby teeth are simply too small for a grown-up mouth by holding up some baby teeth against her own. She shows on the model that in the gums, under the first teeth, there is another set of toothbuds. These will grow into new teeth – second teeth – and push the baby teeth out.

Mac Plaque and Lillian Lollipop, two puppets, appear and tell about all the tooth problems they cause. A model of a tooth showing various stages of decay demonstrates the evil work they do. Thus, Louise develops a tooth truth: brush your teeth. She demonstrates the proper technique for brushing and flossing to remove plaque and to prevent cavities from forming. Plaque is defined as a collection of dead germs, decaying food and acid around the gums.

Other tooth truths discussed are: eat the right kinds of foods, watch between-meal snacks and visit the dentist.

Follow-up Activities

1 How many children have lost a baby tooth? Which tooth came out first? Does anyone have a fully grown-in permanent tooth to show off? How about one that's just starting to show? Who has the loosest tooth? Who lost one most recently?

2 Who has been to the dentist recently? Have him tell what the dentist did for his teeth.

3 Does anyone have a baby at home who has no teeth yet? What does the baby eat? Why doesn't the baby eat what the rest of the family eats?

4 Discuss the different shapes and functions of teeth. If possible, compare human teeth with animal teeth. What foods are particularly hard to eat when front teeth are loose or missing?

5 If possible, have a dentist visit the class or perhaps the dentist would allow the class to visit the office.

6 Ask a local dentist or school nurse to provide some disclosing tablets, tooth paste, toothbrushes and some small mirrors. The dye from the disclosing tablets (which is harmless) will show where teeth need more brushing, particularly areas where plaque is building up.

7 Help students make a chart to hang in their bathrooms at home. Have them check off each time they brush their teeth.

8 Demonstrate with a comb or a large set of plastic teeth and a toothbrush how hard you must brush to remove sticky foods like peanut butter or fudge. Have the children try too.

9 Ask the school nurse to demonstrate the proper method of flossing. How is flossing different from brushing? Why are they both important?

WHAT KEEPS YOU ALIVE?

Concept 4-1

Summary of the Telelesson

The discovery of a little dead bird leads Louise to talk about what it means to be alive. To encourage the children to think about the body systems that are essential to life, she uses the anatomical model to review the functions of major organs in the respiratory, digestive and circulatory systems. Pointing to the lungs, heart, stomach and intestines (which she has taken out of the model), she tells viewers that because doctors have learned how to use medicines and machines to help keep people alive, many people can go on living even if some organ in their body is not doing its job. Blind people, deaf people and people with other handicaps can still enjoy living as long as their brains are alive. She stresses that without the brain, none of the other organs would work. Slides of children engaged in various daily activities help viewers understand how they use their own brain – to keep their wonderful body machine alive and in good working condition. Without their brain and its nerve network and sense organs, they wouldn't know enough to do the things they need to do to have a healthy body: eat proper food, brush their teeth, wash their skin, exercise, rest and sleep, visit the doctor, stay out of accidents.

But, Louise tells the children, although they need to do all these things to stay alive, they need to do some other things just as important to feel alive.

She uses a doll's face to demonstrate some feelings that make people feel alive: sadness, anger, boredom and happiness. Then she demonstrates the most important feeling of all: love. She tells the children that to feel really alive, they need people to love them and they need people to love. She goes on to describe other activities of the children that contribute to their feeling alive: using their senses to enjoy things, doing things, making things, creating things and, something they're doing all the time, learning new things.

Follow-up Activities

1 If children have really grown out of their body outlines, they may wish to make new ones and to include all the important systems reviewed in the program.

2 What are some things the children have been doing that have helped them grow?

3 Have children tell about times when they feel very happy and times when they feel very sad. If it is difficult for children to talk about their feelings, they might draw two pictures showing themselves in contrasting situations. Another technique is to have them complete a variety of sentences: e.g., I feel happy when _____; I get angry when _____; I feel like giggling when _____; I cry when _____.

4 A natural corollary to "What Keeps You Alive?" is "What Makes You Die?" Some students may have recently experienced the death of a relative or friend. Many will be familiar with the death of pets. It is important for students to be able to talk about their feelings in an open atmosphere of acceptance and sympathy. Teachers may feel understandably wary about discussing this subject and of giving explanations that might be at variance with what children have been told at home. If children focus on the subject of death, the teacher's analogies to pets and plants will be helpful; but most helpful of all is just having someone listen.

Earl A. Grollman, in his essay "Children and Death" (*Concerning Death: A Practical Guide for the Living*, Beacon Press, 1974), notes that adults should attempt to answer questions in the spirit in which they are asked, but cautions against teaching children as if you have final answers they must accept. He also summarizes some research on children's understanding of death, indicating that children between the ages of three and five may "deny death as a regular and final process." He

reports that, "Between five and nine, children appear to be able to accept the idea that a person has died but may not understand it as something that will happen to everyone and particularly to themselves."

LIFE NEEDS

Concept 4-1

Summary of the Telelesson

There are certain basic necessities for life. These include food, air, water and light. The lesson illustrates the constant need that all life forms have for these basic elements. The responsibility that people have to see that these life needs are cared for in a healthful condition is discussed.

Follow-up Activities

1 Water is one of the basic major necessities for life. Ask the children to draw pictures of various ways that water is necessary and useful in life. (e.g., drinking, bathing, swimming, ice skating, cooking, fishing).

2 Have the students imagine they are going on a trip. Set up a situation such as a summer back packing trip. The campsite is in a rugged, isolated area and there is no food or water available. The terrain is very hilly and at night the temperature drops to around 50 degrees. Have the children consider the above conditions and, as a class, identify all that they'll need with them on their trip.

3 People are animals yet they seem to require much more than most other animals. Also human needs vary greatly according to the individual. Prepare and then read a list stating various human needs. Have the students react to the following statements. Are the following always true, sometimes true, true for only certain people or true for everyone?

All people need clothes
All people need a garage
All people need a two-week vacation
All people need friends
All people need a home
All people need a family
All people need a car

THE SAME DIFFERENCE

Concept 4-2

Summary of the Telelesson

There are likenesses and difference in all living things. A series of slides illustrates this concept. Examples of how all living things relate to each other according to their similarities while still being unique are shown.

Follow-up Activities

1 All living things are alike in that they have certain basic needs, oxygen for example. However, the method for taking in oxygen varies. Fish take in dissolved oxygen from surrounding water as it passes over their gills; plants take in oxygen through minute openings on their roots and leaves; and people take in oxygen through their mouth and nose.

Have the children draw or cut out pictures of the above examples and then, as a class, discuss their oxygen likenesses and differences.

2 Ask the children to compare themselves to other animals. They can tell or draw pictures to explain how they are alike and how they are different. For example:

People	Birds
Have an outer covering of skin which serves as protection.	Outer covering of feathers which also serves as protection.
live in houses.	live in nests.
have four limbs, two arms and two legs.	have four limbs, two wings and two legs.
babies born alive.	babies hatch from eggs.
able to fly in an airplane.	able to fly unaided.

3 Although man shares many similarities with other animals, there is no doubt that he is unique. Most of what makes him unique and sets him apart from other animals is his brain. His brain allows him to speak, think, reason, make decisions, remember and experience a variety of emotions. Ask the children to draw pictures illustrating things man can do that no other animal can. Ask for volunteers to describe and share their pictures with the rest of the class.

LOOK AROUND YOU

Concept 4-6

Summary of the Telelesson

The program defines environment as surroundings -- everything outside oneself. Many examples of the environment are given, from general settings such as the home and school environment to specific ones such as an article of clothing, piece of furniture and other people.

The program illustrates the many ways people are affected by the environment. It affects what is worn, what is done, how people act and how they feel. The lesson concludes by reminding viewers to be aware of their environment -- just look around.

Follow-up Activities

1 Set up exampies of controlled environments. This can be achieved by preparing a balanced aquarium to illustrate how plants and animals depend on each other for continued existence. A plant terrarium is another example of a controlled environment.

2 Many recreational activities depend on a specific type of environment. Have the children give examples of this.

3 Man is unique in that he is highly capable of changing his environment to suit his particular needs. Have the children discuss or draw pictures of this (e.g. heating, air-conditioning, space suits, irrigation methods, astrodome.)

4 Discuss the ways man has undesirably altered his environment. Define litter and pollution. Ask the children if they have discovered examples of litter in parks, picnic areas, along the highway or in recreational waters. Allow them an opportunity to tell what they saw and what, if anything, they did about it.

5 Have the children draw pictures of something that each one can do to improve the environment. This may include cleaning up his own room, yard, school playground or park area.

IT'S WHAT YOU EAT

Concept 4-4

Summary of the Telelesson

Louise enters carrying two large bags of groceries. Explaining that living things need food to give them energy, to help them grow, and to make them look and feel their best, she takes out sunflower seeds and feeds her gerbils.

After illustrating the absurdity of a one-food diet, she unpacks the rest of the groceries and sorts them into meat, milk, bread and cereal, vegetable and fruit groups. To emphasize the importance of eating regularly and the dangers of not doing so, Terrible Tempered Tom O'Toole, a cartoon character, is introduced. Tom was angry every morning and couldn't do his lessons until his teacher found out why. "No wonder," she said. "Tom's stomach is empty and so is his head."

Choosing items from the four food groups (chicken, green beans, baked potatoes, rolls and butter, milk and apples), Louise plans a balanced dinner. She also explains why eating too much is as bad as eating too little. Being fat means the body has to work too hard to stay healthy. Porky, another cartoon character, is seen green-faced at the carnival amidst the remains of hot dogs, French fries, peanuts, soda, candy and ice cream. This shows clearly what else can happen to people who overeat.

Louise closes the program by wishing viewers "happy eating" in five languages.

Follow-up Activities

1 Ask students: Why do you eat? Why do you need to eat so many different foods? Which foods are especially important for which parts of the body? (e.g., milk for bones and teeth.)

2 Discuss: Why is a good breakfast important? This point should be discussed in relation to the body's need for food as fuel for energy. Name two good breakfast menus. What makes them good? Name a breakfast you could prepare for yourself.

3 Have students compare how food for the body is like gas for an automobile.

4 Discuss: When is the best time to eat candy? Why? Why do you eat snacks anyway? Name some good (nutritious) ones.

5 Have children mark food pictures, using different colors, according to the four food groups. Are their meals balanced? List or draw the school lunch menu on the board and sort these foods to the groups.

6 See how many different foods children can identify in each food group. Choose a group and have each child name a food; then write the food on a slip of paper with the child's name. Then each child can draw his or her own contribution to the list, and from these a giant collage can be created.

7 Make butter from a jar of cream, with children taking turns shaking. Serve on crunchy crackers for a snack.

8 Collect information and pictures of children in other lands eating different foods. Discuss how geography, custom, ease of growing and gathering food affect what people eat.

9 Have a tasting party: a simple one with something sweet (marshmallow), sour (pickle), bland (cracker), sharp (cheese). Have children note the different textures of these foods as they try them. Or have a vegetable tasting party using cherry tomatoes, carrot rounds, turnip sticks, cauliflowerettes, cucumber slices, bean sprouts, celery sticks.

10 If your group is a multi-ethnic one, parents might help in preparing and serving such foods as: arroz con dulce, tortillas, spaghetti, knishes. Each parent might give a brief description and summary of her particular culture and its foods.

WHAT'S YOUR FUEL?

Concept 4-3

Summary of the Telelesson

Hissing and puffing, a toy steam engine slows to a halt when its fuel is taken away or used up. Louise points out that both the engine and the human body need fuel to keep going and illustrates through the use of diagrams and models how food is changed to fuel. Beginning with a tempting piece of chocolate cake, she explains how food is mashed by their teeth, moistened by saliva and swallowed, and how it then moves through the food tube, stomach and intestines in the process of being converted into a liquid consistency not unlike a blended lunch.

Children are asked to swallow a make-believe bite of cake, feeling the muscles of the throat as these muscles help push the food down toward the food tube into the stomach (a pouch that can change shape and stretch). Louise explains that muscles and juices in the stomach break down food and pass it into the intestine, which is curled up inside the body like the cord of a telephone.

Viewers watch as Louise pours a heavy liquid through a cloth to demonstate how digested food finally seeps into the blood stream to be carried to all parts of the body as fuel. She compares the residue in the steam engine pan to the waste the large intestine pushes out of the human body. "Now you know two ways you and the little steam engine are alike; you both need fuel and you both make waste."

Follow-up Activities

1 As suggested at the end of the program, have the children make a map that shows they know where their supper is going tonight.

2 Have students discuss: How are you like a car or the steam engine you saw? What happens when a car runs out of gas? Will a flashlight work with no batteries? Why not? What happens when you run out of fuel? How do you feel? (Empty, hungry, tired, cross.)

3 Discuss: Does a bus use fuel when it is standing still with its motor on? Do you, when you are standing still? Sitting? Sleeping? Explain. When do you think you use the most fuel? The least?

4 What makes your stomach growl? Why do you burp? (Sometimes when your stomach is empty, it growls. Swallowing too much air with your food makes you feel uncomfortable, unless you burp it out. When you get very, very hungry or you can't burp out the swallowed air, you may feel sharp pains.)

5 Put all the parts of a sample lunch in a blender. Compare the work of the blender to that of the body's digestive system. How long must the blender run to make the food thin enough to pass through cheesecloth? How long does the body take to do this?

6 Have the children feel their heartbeat while sitting quietly. Have them do it again after running in place. Discuss what happens. Which way uses more energy and more fuel? Why does the heart pump faster during exercise?

7 Just after their lunch or snack, ask children what is happening to the food they just ate. Have children listen to their stomachs (usually much easier for children to hear than their hearts) through a stethoscope. A simple one can be made from a funnel and plastic tubing including a Y-tube.

Summary of the Telelesson

As Andrew and Susie bound over a broad meadow and explore a great cathedral, they begin to understand how different spaces influence their feelings. In the cathedral Susie wishes she were a bird able to swoop through the colorwashed sunlight. Andrew sniffs adventure in a dark stone spiral staircase, where Susie feels fear. Together the children feel the power of a long narrow space that makes them want to run, and they also discover the uneasy feeling of a mysterious kind of space.

Follow-up Activities

1 Encourage discussion about the spaces shown in the program: open meadow, cathedral, dark stairway, long narrow aisle, mysterious subterranean space, long narrow space with "bumps in the road," outdoor garden "rooms" and outdoor house. How did these spaces make the children feel? What would they have wanted to do there? What was it about each space that made them feel a particular way? Help them to identify qualities of size, shape, light and texture that may have caused their special feelings.

2 Susie and Andrew responded to the same space in different ways, particularly the dark staircase. Help children to understand that each person feels differently because he takes his own experiences with him wherever he goes. If possible, get children to relate their own experiences to why they did or did not like a space in the program.

3 Encourage children to talk about their own favorite spaces: rooms in their houses, outdoor places, spaces anywhere that they like. Help them identify qualities that make certain spaces nice ones. Encourage discussion about their least favorite spaces and help them analyze why these spaces are unpleasant.

4 Have children identify several spaces in school which have distinctive qualities of size, shape, light and texture, and compare feelings about them; for example, an auditorium, a broom closet, a playground. Are there both small and large fenced-in areas, and do they cause different feelings? Why?

5 Encourage children to create original drawings of spaces that are pleasant or unpleasant. They can share these drawings and discuss them.

6 Encourage children to bring in pictures of spaces that they like or do not like. Do others have different feelings about the pictures? Why?

7 Have them explore small and large spaces within the classroom. While they are in the spaces, have them explain how they feel about a particular space and why.

Summary of the Telelesson

The earth is covered with living things – with plants and animals and people who share in the balance of nature. But man has upset the balance by using land and trees without replacing them, and by building factories and engines which pollute the air and water. People are beginning now to take care of this planet and its plants, animals and people. If everybody begins caring for the earth, it will be possible for this planet's natural balances to be maintained.

Follow-up Activities

1 Work out a simple plan with the children to share responsibilities for improving the classroom environment.

2 Do some planting in class and on a small plot of the school ground if possible. Plant enough so that each child can later give several small plants as gifts.

3 Start a campaign with your children, using slogans and "commercial jingles" such as, "Save the candy wrapper; drop it in the can." Prepare a school bulletin board to spread the campaign.

IN THE BEGINNING

Concept 4-7

Summary of the Telelesson

Louise cracks open an ordinary hen's egg and then shows viewers a variety of other eggs, explaining that they all contain a yolk and a white even though they are from different animals. To demonstrate that some eggs have something else inside, a film is shown of a gosling hatching. Louise explains that all animals begin as something very small: some in eggs that hatch outside the mother's body (like the gosling), and some (like kittens) thatsgrow into babies inside the mother. A slide outline of kittens inside a mother cat and pictures of how the kittens look when they are six weeks old provide a visual comparison with the hatching of the gosling.

Louise explains that a human baby begins as a single tiny cell the size of a dot, which grows in a hollow place in the mother's body called the uterus. As Louise explains the various stages, a slide sequence is used to show the development of life from this single cell to a human baby. Children see the cell dividing and growing until, after four weeks of growth, it looks like a tadpole in a bed of water. At five weeks its heart begins to beat, and cells that will make arms and legs begin to grow; at two months it begins to look more like a baby. At five months the baby is about 10 inches long, and its mother begins to feel it moving within her. A slide of a seven-month-old unborn baby shows that, although it appears to be completely formed, it still has two more months to grow. Louise points out the tube at the baby's navel connecting it to the mother's bloodstream. She explains that this is how the mother's blood provides food and oxygen and gets rid of waste for the baby before birth.

A film sequence takes the children inside a hospital nursery, where a newborn baby girl is carefully checked by the doctor, then gently weighed and measured, identified, washed and dressed by nurses. Then a film of the new baby with her parents shows the excitement, tenderness and pride felt by parents over the birth of a new baby.

Follow-up Activities

1 If possible, obtain a fertilized chicken egg and break this open so that the children can see the very spot where new life is beginning. And, of course, a very exciting possibility that should not be overlooked is the incubating and hatching of chicken eggs in a corner of the classroom.

2 Hatching frog, toad, snail or fish eggs is an excellent experience for appreciating embryonic development.

3 If there is a nearby zoo, inquire if any animals have been born recently and, if so, plan a field trip to visit them.

SECRETS IN YOUR CELLS

Concept 4-7

Summary of the Telelesson

Louise, surrounded by plants and flowers and animals, shares her enjoyment of spring with the viewers. She points out that all living things are alike one way: they all are made of cells. But, while holding a bunny, she wonders why a bunny will grow up to be a rabbit and not a cat, and "why you are a human and not a bunny." She explains that people have known for a very long time that living things make new living things of their own kind. And rabbits make rabbits and people make people because of very special secrets in their cells.

As the children watch a movie of a cell dividing, Louise points out the secret – the dark grey threads that contain genes – "packages of information which will decide what you will look like when you are born."

She reviews the parts of a cell on a cell model, comparing the information in the genes to a blueprint for building a house. That single cell, she stresses, has all the information it needs to make something what it is going to be. Louise defines embryo as "a word we call animals before they are hatched or born" and shows the children pictures of embryos of three different animals. At first they all seem to be the same, even though their genes are different; but on closer examination, the children see that one is a bird, one is a pig, and one is a human being.

Louise explains to the children that their genes are inherited, or gotten from their parents – half from their mother and half from their father – and that their genes know, before they are born, whether they will be boys or girls, what their skin color and eye color will be, and whether they will have curly or straight hair. Using slides to illustrate, she points out that one of her daughters looks like her father and the other daughter looks like her. So, she adds, the genes in your body's cells will also decide what your children will look like when you have children of your own some day.

The lesson concludes with a comparison of inherited characteristics and learned characteristics. The children are led to see that, although they have no control over inherited characteristics, they can decide for themselves what kind of people they will be and what they will do with their own lives.

Follow-up Activities

1 Have the children draw self-portraits (to the best of their ability – don't expect true representation) and note on drawings which of their features they think came from which parent.

2 Using photographs that the children have brought in, have them study the photos to see if the guesses made on their self-portraits are accurate. Divide the class into small groups. Give each group a set of family photos that includes different family members in different settings. Have children study the pictures to discover and discuss what similarities they can find among different family members.

3 Make a random display of pictures of various parent and baby animals. See how quickly children can sort them into proper family groups.

4 Review the names of baby animals with the song "Kids" (*The Sesame Street Song Book*, Simon & Schuster, 1971).

5 To spark discussion as to what things people themselves (rather than genes) determine, children will enjoy hearing various selections from the Marlo Thomas *Free to Be. . . You and Me* album.

6 Discuss: How many things have you decided for yourself today that had nothing to do with your genes? Make lists of things we can choose to do. . .or be.

SAFE ALL AROUND US

Concept 5-1

Summary of the Telelesson

This mini-documentary presents the various people who work to ensure the safety of our food, water and air. Environmental specialists at different levels (national, state and local) are concerned and work with this health concept.

The telelesson points out that there are things people can do on a personal level to see that the world remains safe all around them.

Follow-up Activities

Many people are concerned with the safety of food, water and air.

1 Food - A representative from either the state or local health department checks the food sold in stores and restaurants. He may also check the place itself. As a class or individually talk to the owner of a food store or restaurant. Have the students question the owner about what the health department does to make sure the food he sells is safe to eat. Have the children draw pictures of other people concerned with the safety of food.

2 Water - Various environmental specialists contribute to see that water is safe and healthful. Have the children identify the many needs and uses for clean water (drinking, sanitary purposes, recreation.) Ask these questions: Do you think it is a good idea for health department workers to check water in swimming pools to make sure it is clean? Why or why not?

3 Air - Environmental specialists also work in the area of air safety. In Nebraska there is a problem with natural air pollution caused by dust storms and pollen from plants. However, most air pollution problems are concentrated in the state's larger cities. Ask the children to explain why this is so (more cars, trucks, buses, planes and industries).

WATCH OUT!

Concept 5-3

Summary of the Telelesson

This program deals with safety, and it points out that a child who is old enough to go out of the house alone must watch out for his or her own safety. Warning signs are used by Louise to remind children that signs help them take care of themselves.

Louise uses a film to tell the story of Dora Dingbat, a girl who got into all kinds of trouble because she didn't heed warning signs or remember the things her parents told her she shouldn't do. All in one day, Dora forgets to tie her shoe laces and falls downstairs, nearly gets bitten by a dog, hit by cars and a train, drowned and kidnapped. She thinks the solution is to stay home to avoid trouble. But, as Louise points out, there are also potential dangers at home, such as electrical outlets, medicines, matches, knives, scissors, plastic bags, toys underfoot and refrigerators.

After talking about and demonstrating how hazardous these commonplace things can be, Louise ends the program by saying, "Maybe some of them don't look dangerous, but I want you to watch out! Don't be a dindbat!"

Follow-up Activities

1 Review and discuss the various predicaments of Dora Dingbat. How could each of them have been avoided? Ask students to recall an incident when they forgot a safety rule and had an accident as a result.

2 Have the children make up some safety rules for themselves.

3 Take the class on a walk around the school neighborhood. How many safety signs can children find? Even if the children can't read, they should become familiar with the shapes and colors of traffic signs. Make some oaktag signs and play flash card games until children can identify each sign.

4 Assign certain students the role of traffic monitor. Set up the room so that children can walk around as if thrrough a neighborhood. Traffic monitors should change the placement of signs from time to time to see whether students are really alert. This can be done by starting and stopping a record. Students should keep their eyes closed while the music is off so the signs can be changed. Students who don't follow signs drop out of the game.

5 Have children look through magazines to see whether they can find pictures of some safe places for children to play. Can they find any unsafe places?

6 Have the children take turns being safety watchers in the classroom. What kinds of unsafe practices do they notice?

7 Have the children use tables or blocks to design an area of the room that would be a safe place for a two-year-old. Remind the "designers" that two-year-olds like to play, however, so it isn't fair to leave the area empty.

8 Ask the children to bring in toys they feel might not be safe. Discuss why some toys are not safe. Why are the toys of six- and seven-year-olds sometimes unsafe for babies?

9 Ask the local fire department to send a representative to discuss the reasons for fire drills and school inspections.

SAFE RIDE - SAFE DAY

Concept 5-2

Summary of the Telelesson

In this lesson, hand puppets present the safe and appropriate procedure for loading, unloading and riding the school bus. Mr. Anderson, the bus driver, makes sure that his young riders know and observe the school bus rules. He also makes sure that the children realize these rules were set up for their own protection and safety.

The shape, color and meaning of various traffic signs are identified as the bus makes its way to school.

Follow-up Activities

1 Discuss and draw pictures of the various ways that school children get to their school. How might a child who lives in Alaska get to school? How about a child who lives on an off-shore island? How did children get to school 100 years ago?

2 Have the children draw the shapes of the various traffic signs. (See transparency master in Appendix B.) Discuss what pictures or lettering on the sign means. They can color the sign appropriately.

Stop (red octagon)

Railroad Crossing (yellow and black circle)

Warning Sign (yellow and black diamond)

Yield (red and white triangle)

Regulatory and guide signs (white and black rectangle)

3 Have the children compile a booklet on school bus safety. Include drawing, paintings, stories. Ideas for the book include:

A picture of a school bus.

Why most buses are painted a bright yellow and have flashing red lights.

What you do while waiting for the bus.

How you get on the bus.

How you look while riding the bus.

How you get off the bus.

After they have completed the book, give the students an opportunity to share their work with others.

4 There is considerable trading and exchanging of food as the puppets ride to school. However, at one point Waldo stops the trading by reminding Jeannie that their mothers packed their lunches with

specific nutritional requirements in mind and therefore he doesn't want to trade anymore. This situation presents Waldo with a dilemma -- parental pressure to keep and eat only his own lunch and peer pressure to join in with the food exchange and possibly end up with a nutritionally unbalanced lunch. This is an opportunity to talk about nutrition and the conflict that children find themselves in concerning parental versus peer pressure. Question the children about the following:

What food items might be included in Waldo's well-balanced lunch (meat sandwich, apple, banana, pear, carrot and celery sticks).

Should Waldo exchange any of his lunch for someone elses? Why or why not?

If he doesn't want to trade what should he say to the others?

Summary of the Telelesson

Andy and his big sister Hilary wander through the zoo on a warm spring day. They stop to visit birds, bears and other beasts. When Hilary stops to talk to a friend, Andy continues down the path unaware that she is not behind him. Lost! Andy rushes through the Sunday crowd in a frightened panic searching in a sea of legs for his protector. Exhausted and unsuccessful, he pauses and begins to think his way out of his problem.

Follow-up Activities

1 Have the children air some of the fearful feelings they have about sudden separations, particularly in crowded situations. Discuss how they got lost and how they were found again.

2 Dramatization: Give a problem to a group of three or four children which involves sudden traumatic change. Children work on a solution, take various roles, and act out the problem and the solution. Problems might include getting lost at the shopping center or supermarket, coming home to an empty house, being hurt badly with no one around, hearing sudden strange noises in the dark or getting locked in a room accidentally.

3 Show through materials such as puzzles how a rational approach to problem solving is more successful than frantic irrational attack.

Summary of the Telelesson

A rookie fire fighter learns about handling a pumper and hose with models in a training class. He advances to a real drill with real equipment and real teamwork. Suddenly his company is called to a fire. All their practice helps them meet the crisis of a hose break at the fire. The rookie succeeds as part of the team.

Follow-up Activities

1 Provide props such as fire hats, boots, hose lengths, steering wheels or sign-in charts to extend dramatic play about fire fighting. Help children develop appreciation for teamwork and training as it develops in play.

2 Have children report to the class about their fire fighting play as if being interviewed for a TV newscast. Encourage use of new and expressive vocabulary for this colorful topic.

3 Set up a display of choice children's books about fire fighting to attract interest and expand appreciation for the important community service.

4 Talk about other skills that require knowledge and practice to achieve success. Ideas may include such individual skills as reading, playing the piano or driving a car safely, as well as the teamwork skills explored in the program.

STOP – LOOK AND LIVE

Concept 5-9

Summary of the Telelesson

The program highlights the idea that medicines are designed to help us. However, if used improperly, they can be very dangerous. This is illustrated by a dramatic vignette about Johnny who doesn't use the medicine he found in the proper way.

A druggist-narrator then continues the presentation. He illustrates and explains the difference between patent and prescription medicines and the proper storage and safety procedures that must be followed when taking any medication.

Follow-up Activities

1 In the program, Johnny and his parents learn from their mistake and take the necessary measures to rearrange their medicine cabinet accordingly. These measures include:

-- Storing all medicines in a proper place and out of reach of children.

-- Storing all medicines in their own and proper container.

-- Discording bottles or left-over, no longer needed prescription medicines.

Ask for parental cooperation in the following activity. Write a note to be taken home with the following questions.

-- Are all medicines stored out of the reach of children?

-- Are all medicines stored in their proper container?

-- Are left over bottles of prescription medicines discarded when no longer needed?

Request that parent and child check their medicine cabinet and are able to answer "yes" to each of the questions. If not, ask them to make the proper corrections.

2 Present the following story:

Too Much of Anything . . . ?

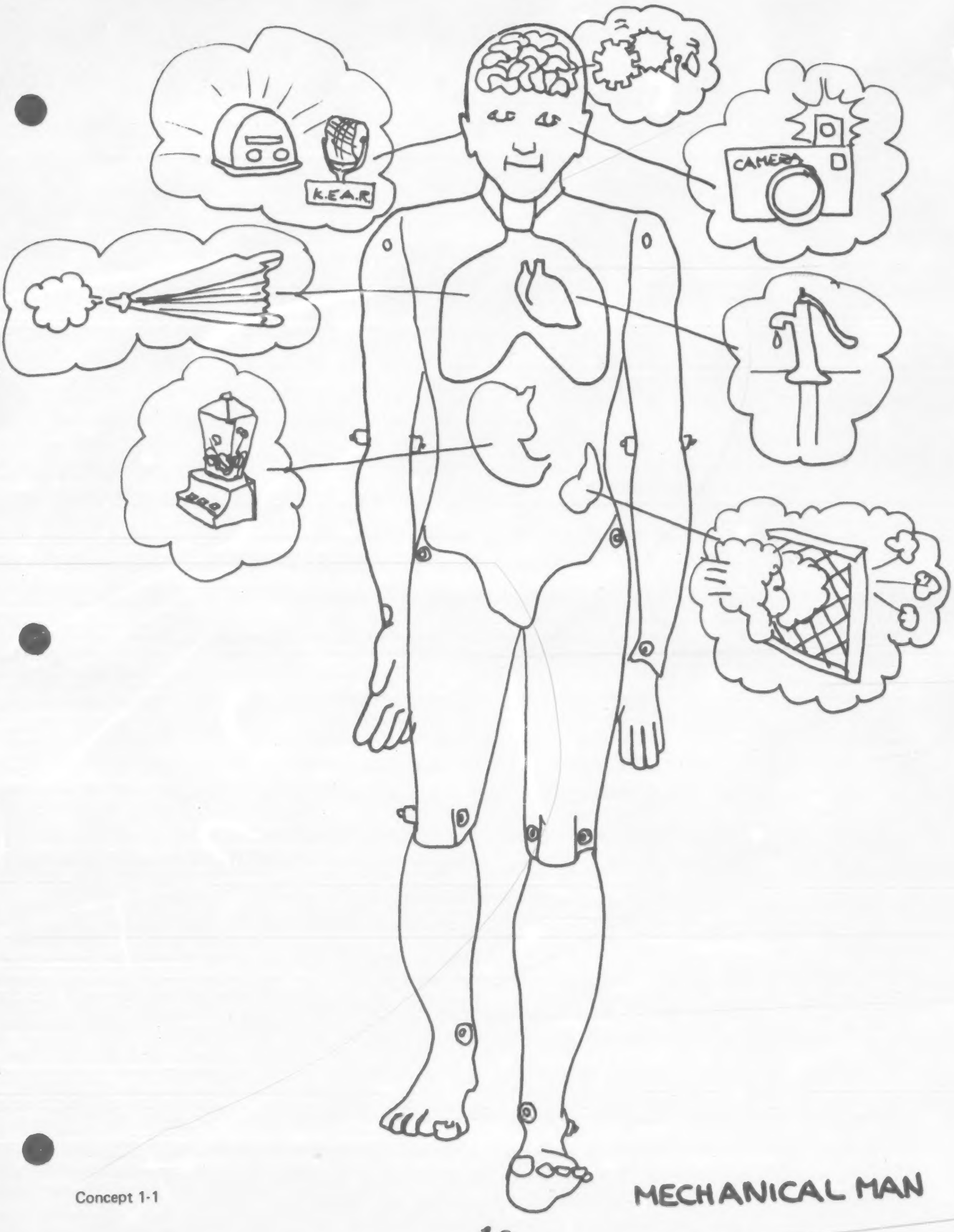
Once upon a time there was a boy who liked peanut butter and jelly sandwiches very much. It made him feel good to eat peanut butter and jelly sandwiches. However, one day he discovered that he had to eat peanut butter and jelly sandwiches, everyday. He had come to depend on having peanut butter and jelly each day. Do you think it hurts us to depend on things? Why or why not?

As students are aware, there are many kinds of medicines and drugs. Most are helpful but if misused can be harmful. Many are harmful when people depend on them when they aren't needed. Ask the children to consider the following questions:

-- What medicines and drugs might people depend on too much?

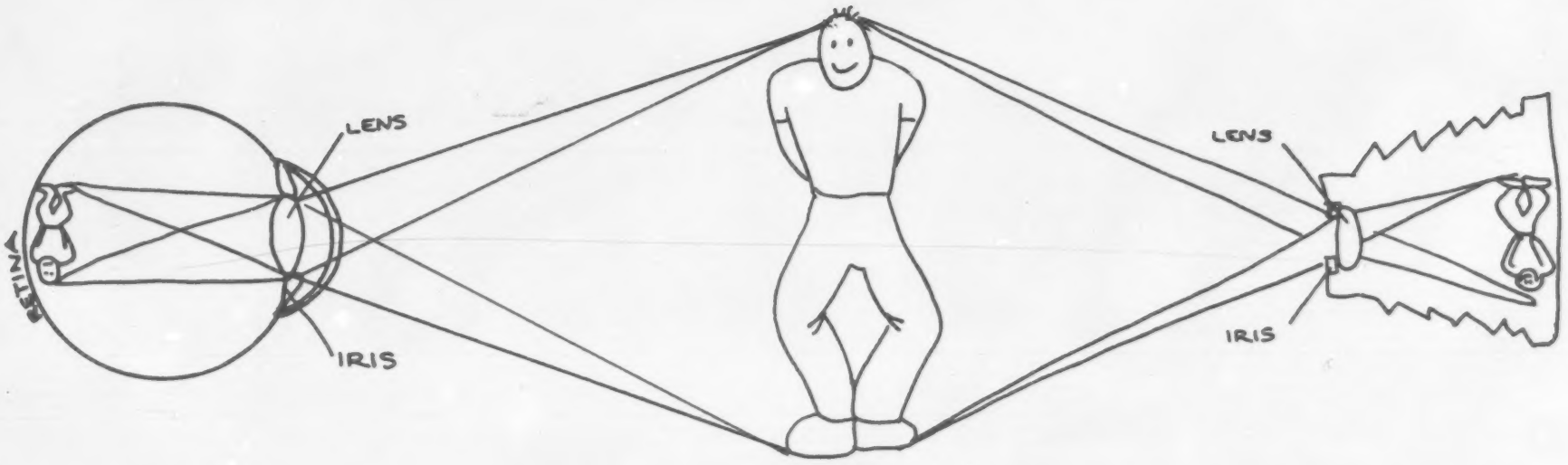
-- Why might people depend on these drugs or medicines?

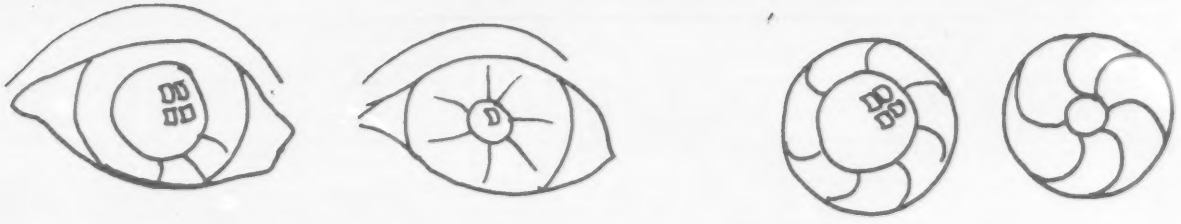
3 Medicines are designed to help. In the program it was explained that they prevent, cure or control. Give examples of medicines that do this. For example: measles vaccination prevents measles; antibiotics (penicillin) cure infections such as strep and staph; and insulin controls diabeties.



Concept 1-1

MECHANICAL MAN





185

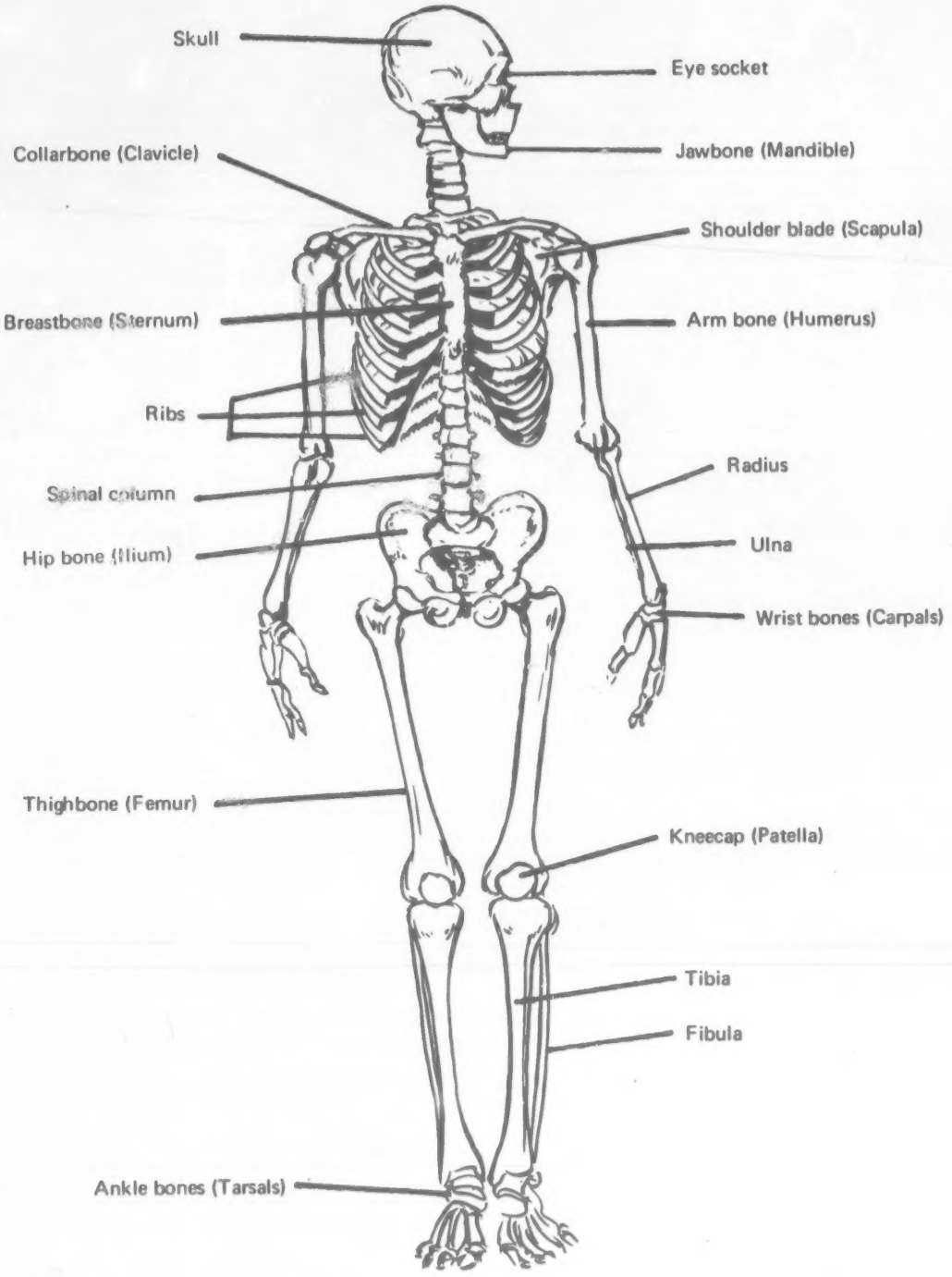
184

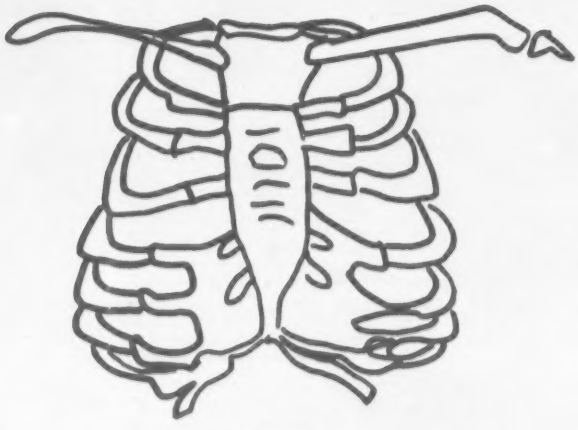
THE EYE IS LIKE A CAMERA

Concept 1-1

SKELETON

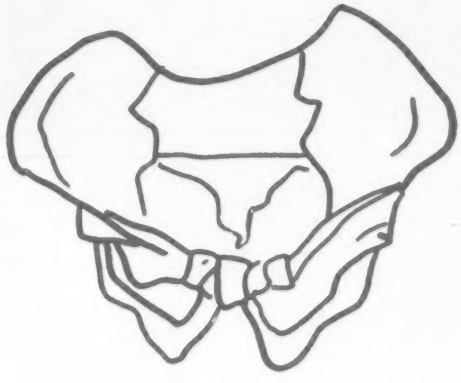
Concept 1-2





RIBS

SKULL

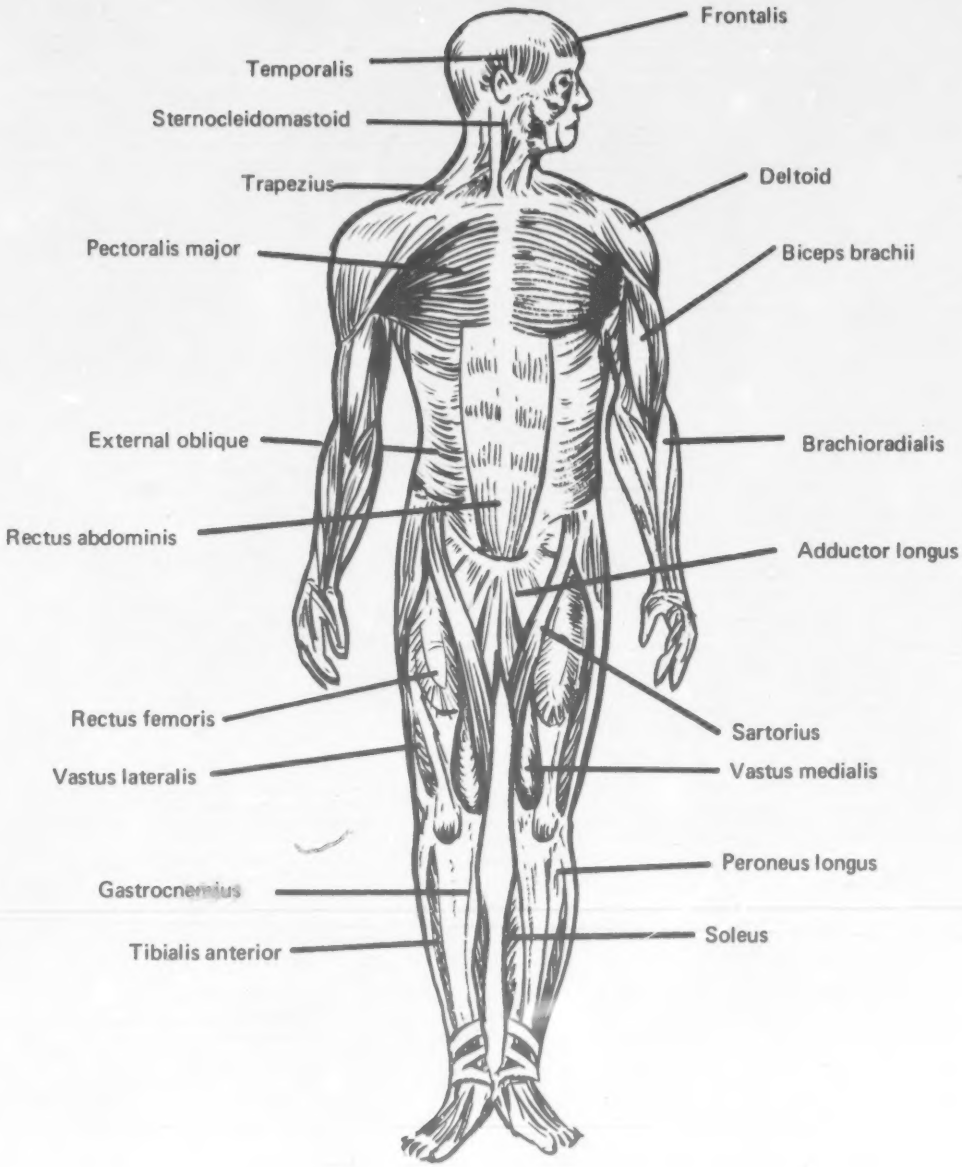


PELVIS

PROTECTIVE CAGES

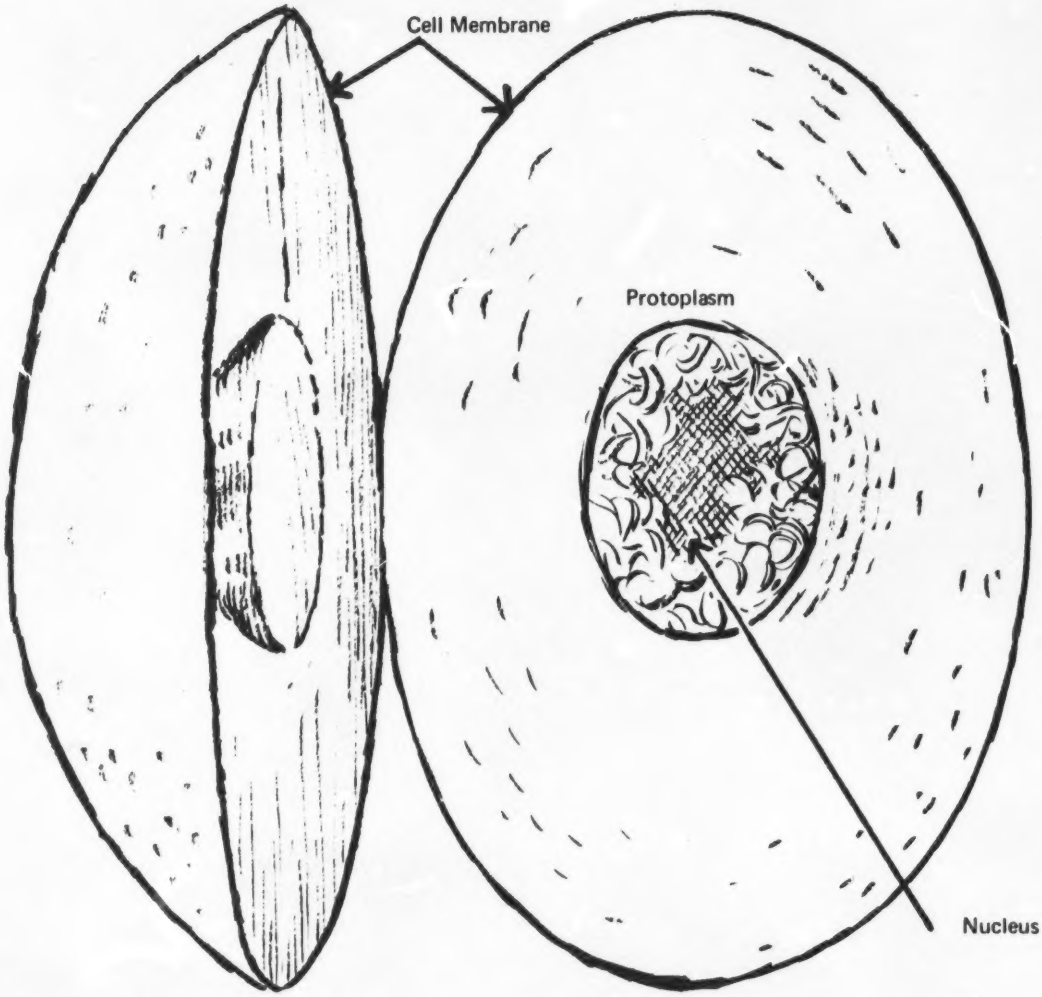
MUSCULAR SYSTEM

Concept 1-3



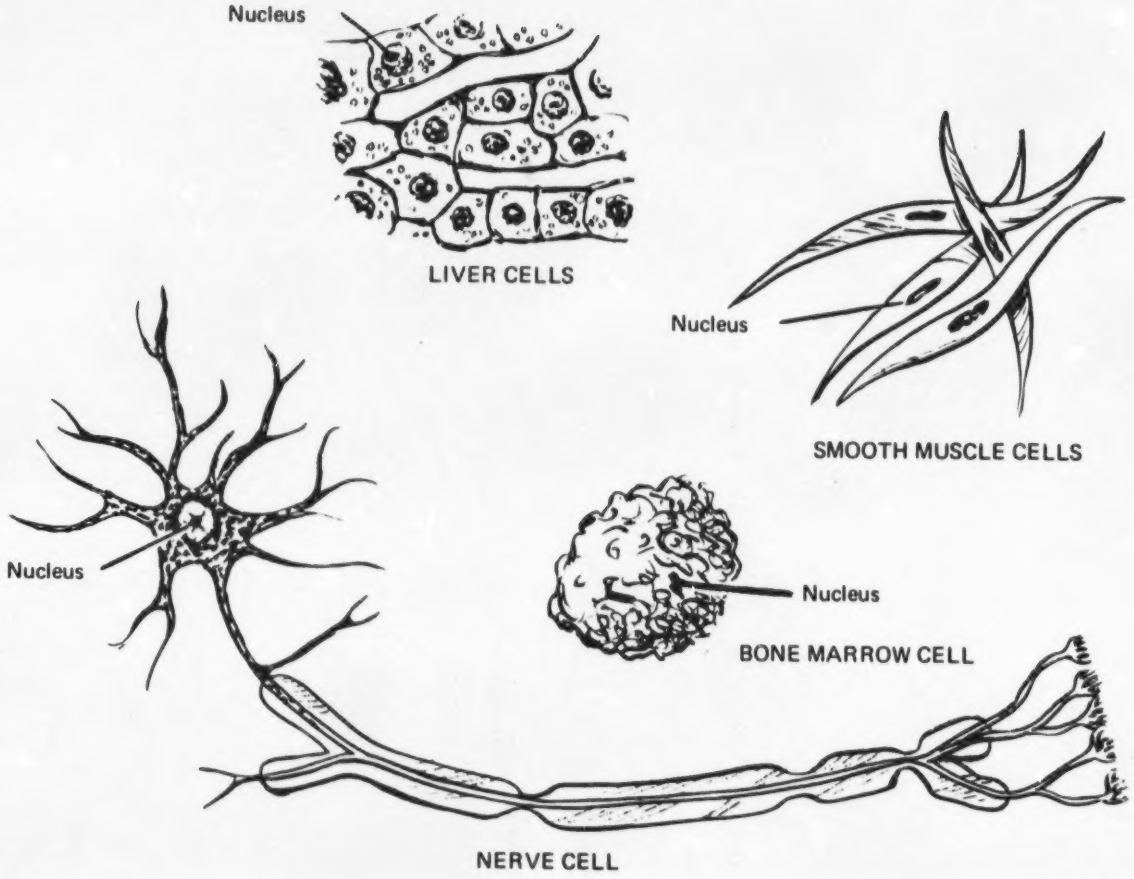
CELL

Concept 1-4



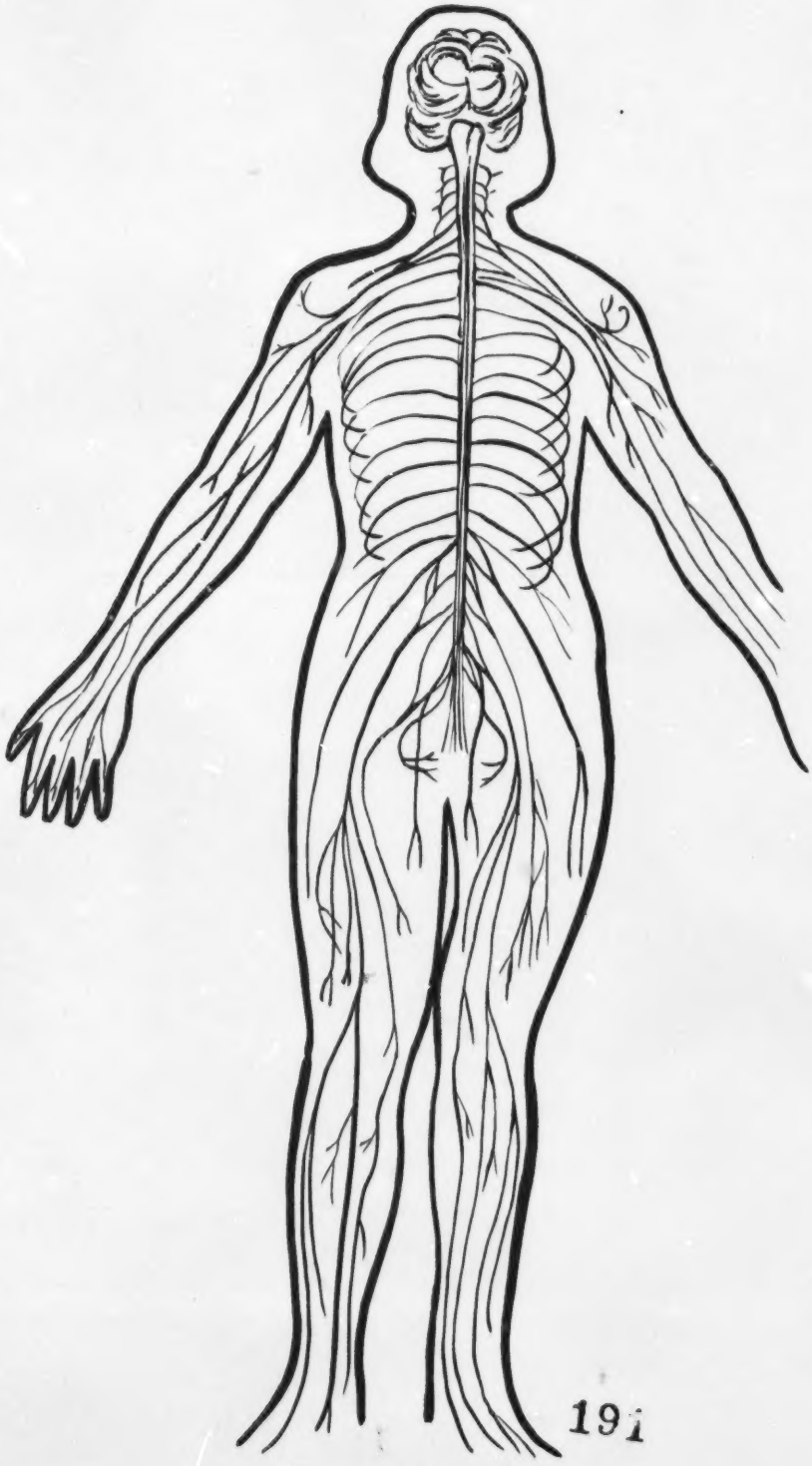
DIFFERENT KINDS OF CELLS

Concept 1-4



NERVOUS SYSTEM

Concept 1-5



CIRCULATORY SYSTEM

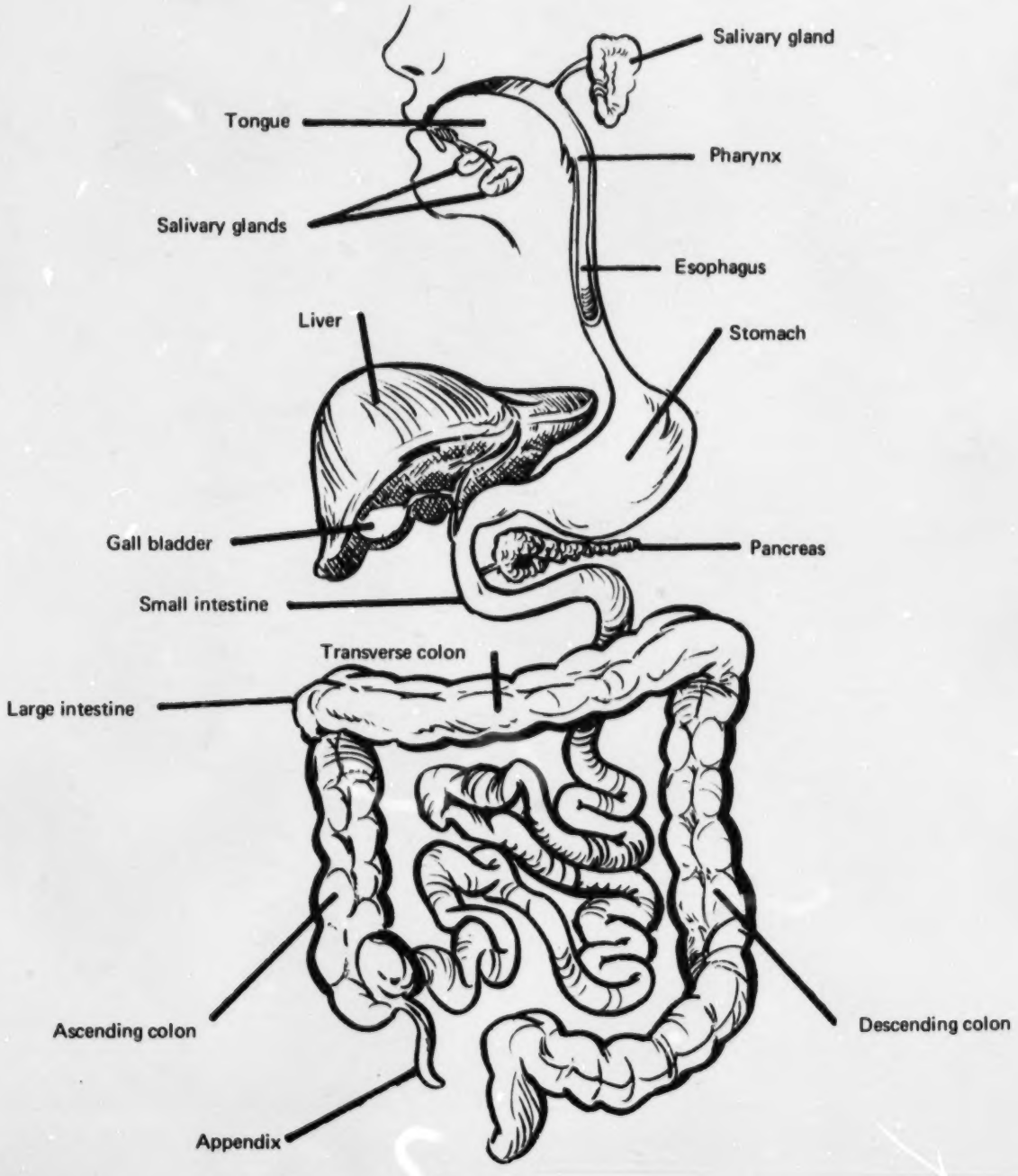
Concept 1-5

RESPIRATORY SYSTEM

Concept 1-5

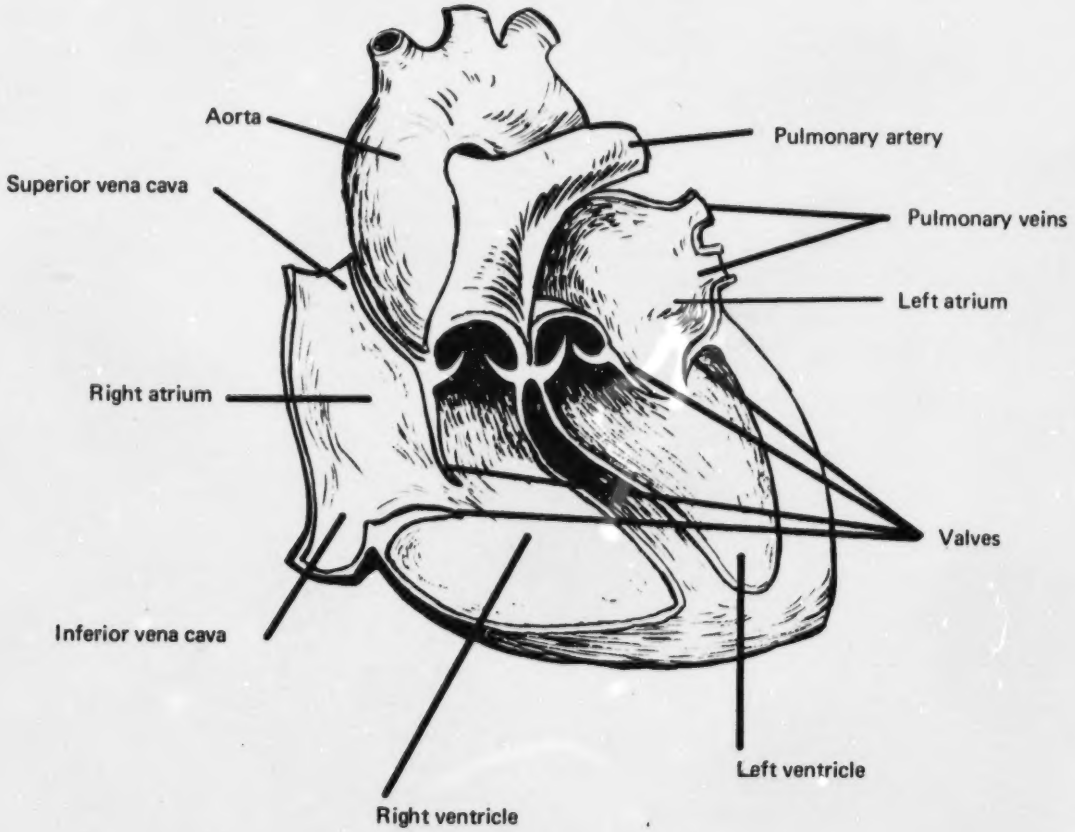
OTHER BODY ORGANS

Concept 1-5



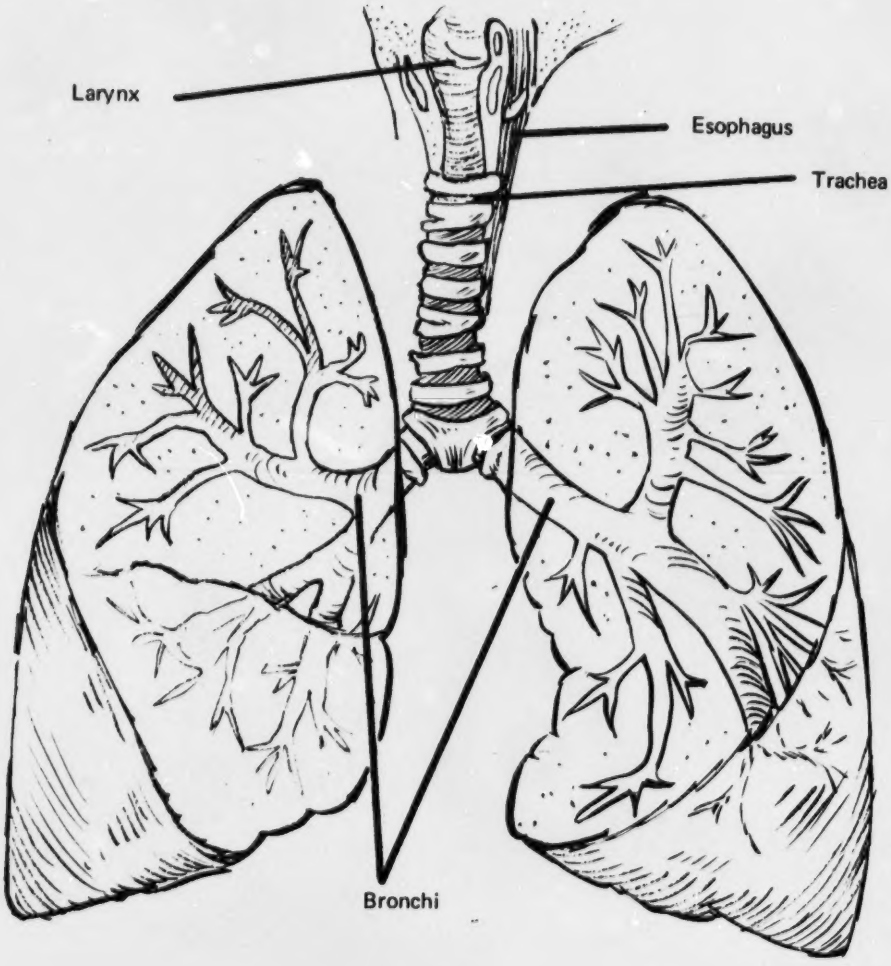
HEART

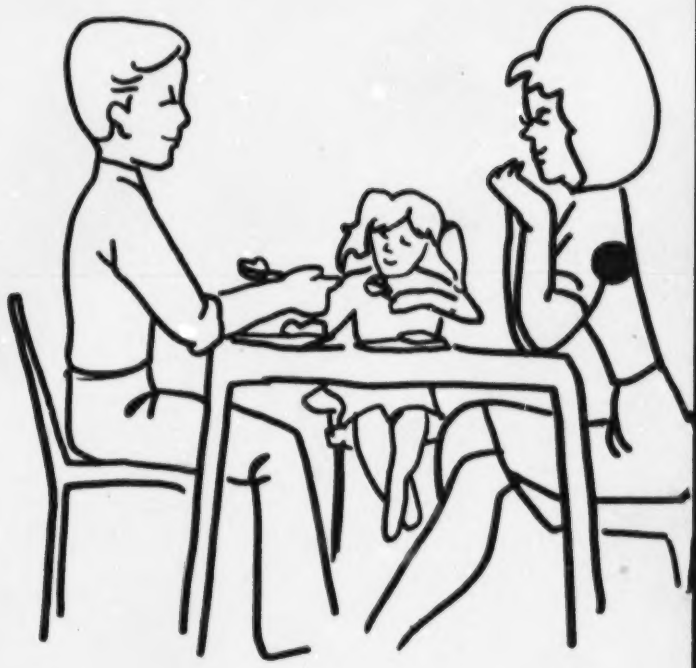
Concept 1-7



LUNGS

Concept 1-8





FAMILIES · PROVIDE PHYSICAL CARE

Concept 2-3

MEET EMOTIONAL NEEDS

Concept 2-3

NURTURE PERSONALITY GROWTH

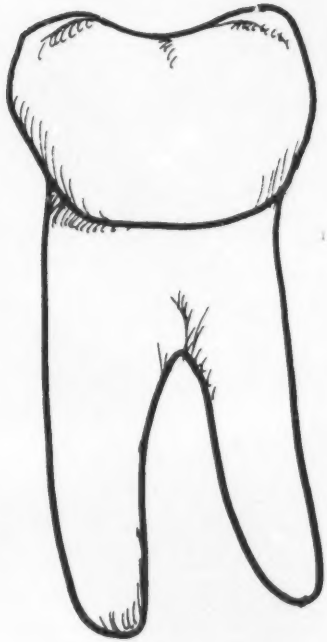
Concept 2-3

SAD, HAPPY, ANGRY, FRIGHTENED

Concept 2-9

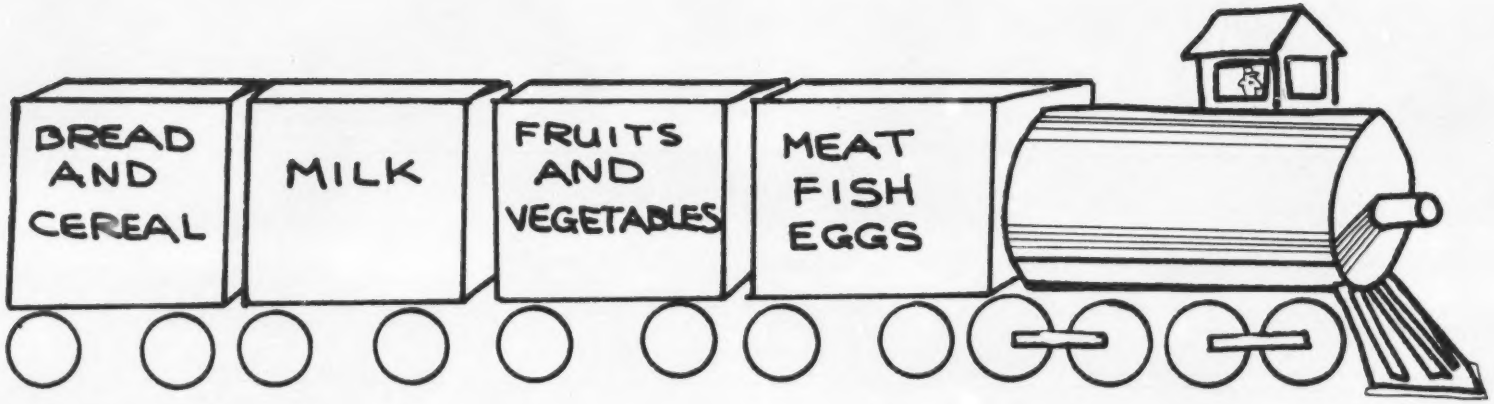
INCISOR

CUSPID



MOLAR

Concept 3-7



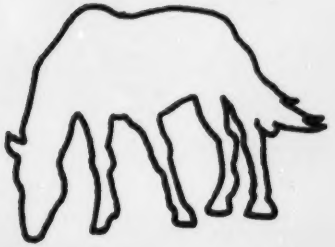
203

FOOD TRAIN

Concept 4-4

MATCHING

Concept 4-7



Concept 4-7

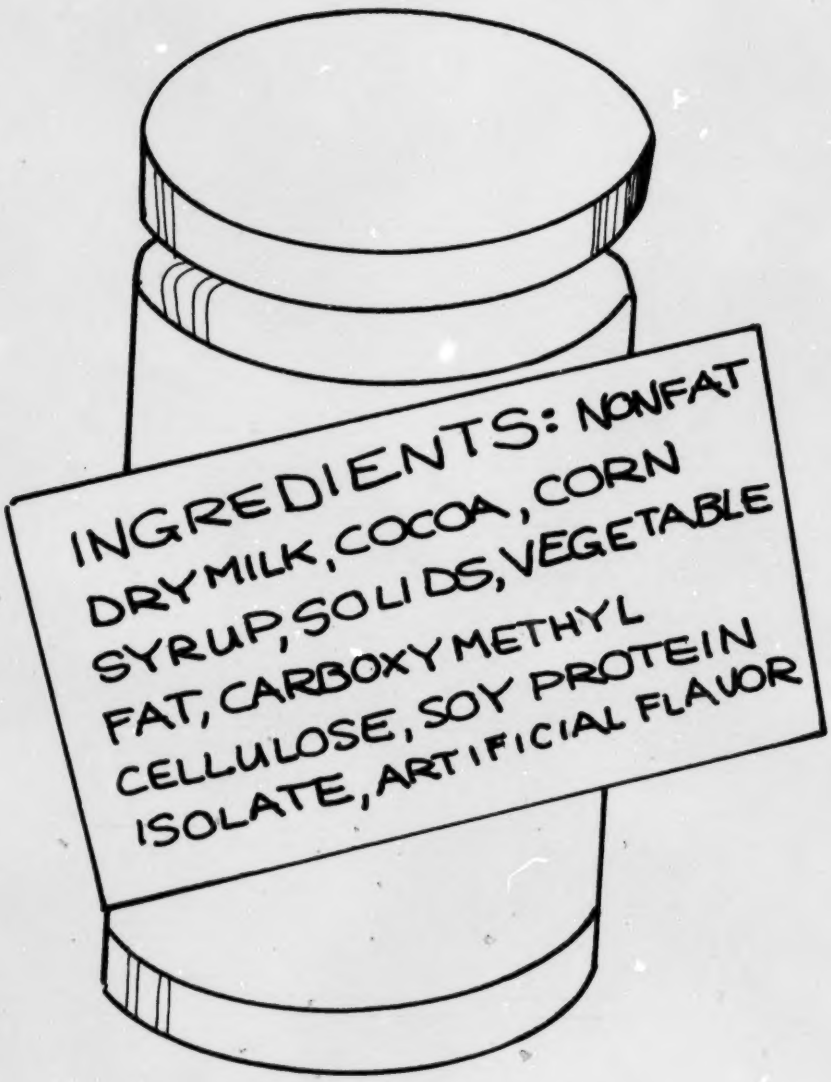
205

MATCH PARENT TO OFFSPRING

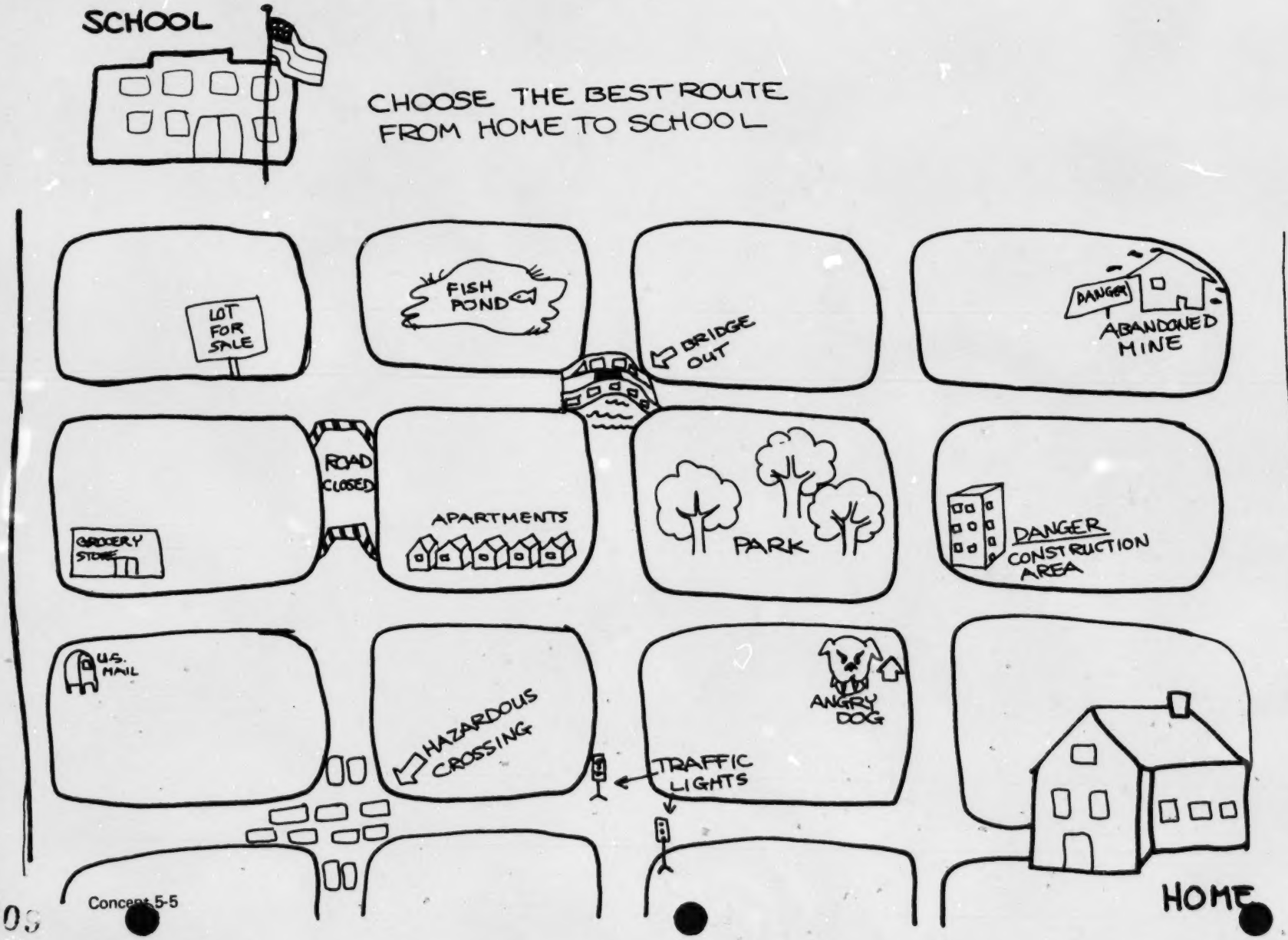
206

Concept 5-2

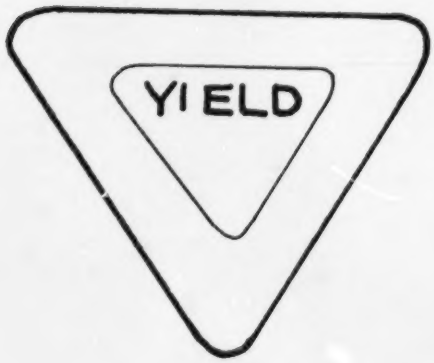
FOOD CONTAINERS

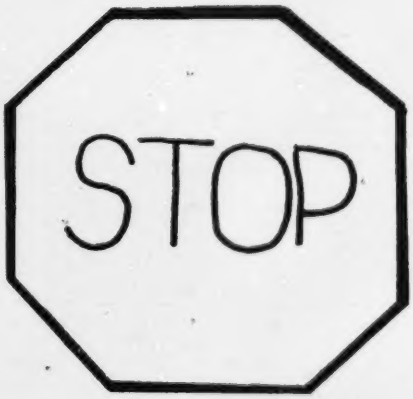

INGREDIENTS: NONFAT
DRY MILK, COCOA, CORN
SYRUP, SOLIDS, VEGETABLE
FAT, CARBOXY METHYL
CELLULOSE, SOY PROTEIN
ISOLATE, ARTIFICIAL FLAVOR

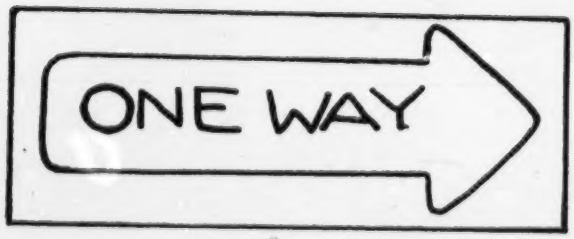
FOOD LABEL


SCHOOL
CHOOSE THE BEST ROUTE FROM HOME TO SCHOOL
LOT FOR SALE
FISH POND
BRIDGE OUT
DANGER
ABANDONED MINE
ROAD CLOSED
GROCERY STORE
APARTMENTS
PARK
DANGER
CONSTRUCTION AREA
U.S. MAIL
HAZARDOUS CROSSING
ANGRY DOG
TRAFFIC LIGHTS
HOME

R
R


YIELD


STOP


ONE WAY

Appendix C

The Nebraska health-related agencies and organizations listed below have free or inexpensive printed material available.

Hints on ordering materials:

1 Do not simply write the agency requesting "everything you have about-_____."

2 To help assure a fast response, request materials by correct title or name of publication, film, pamphlet.

3 Most of these agencies have a catalog or listing of materials they make available. Teachers should request a current catalog or materials list so they may identify titles, cost (if any), and if materials are available in classroom quantities.

Nebraska Heart Association. 3624 Farnam St., Omaha, Nebraska.
--Pamphlets, wall charts and other printed material on heart physiology and heart problems; teacher and student resources.

American Cancer Society, Nebraska Division. 6910 Pacific, Overland Wolf Center, Suite No. 210, Omaha
--Printed materials on smoking and cancer; teacher resources.

American Lung Association of Nebraska. 406 WOW Bldg., Omaha Nebraska.
--Charts and other printed material on anatomy and physiology, smoking and disease control; teacher and student resources.

Nebraska Department of Public Institutions. P. O. Box 94728, State Capitol, Lincoln, Nebraska.
--Printed materials on school health environment, mental health and chemical substances; teacher resources.

Nebraska Department of Health Lincoln Bldg Lincoln, Nebraska.
--Printed materials on community health, dental health and nutrition; teacher and student resources.

Nebraska Society for the Prevention of Blindness.120 South 42, Lincoln, Nebraska.
--Printed materials on safety and school health services; teacher and student resources.

Nebraska Department of Education.233 So. 10th St., Lincoln, Nebraska.
--Printed materials on dental health, anatomy and physiology, consumer education and school health services; teacher and student resources.